

County of Loudoun
Office of Transportation Services
MEMORANDUM



DATE: September 29, 2009

TO: Stephen Gardner, Project Manager
Department of Planning

FROM: Lou Mosurak, AICP, Senior Transportation Coordinator *LM*

SUBJECT: ZMAP 2006-0011, ZCPA 2006-0003—Stone Ridge Commercial
Third Referral

Background

This referral reviews the revised rezoning (ZMAP) and concept plan amendment (ZCPA) applications for portions of the approved Stone Ridge development. The referral also updates the status of the transportation issues identified in the first and second OTS referral on these applications (dated October 10, 2006 and April 17, 2009, respectively).

The subject ZMAP application proposes to rezone approximately 68 acres from the PD-H4, R-16, R-24, PD-IP, PD-CC(SC), and CLI zoning districts to the PD-H4, R-16, R-24, PD-IP, PD-CC(SC), and PD-OP zoning districts; these changes would result in a net increase of approximately 133 sq ft of non-residential (office) uses within Stone Ridge. A summary of these proposed land use changes is provided as *Attachment 1*. The rezoning also includes an additional 100-space park and ride lot along the south side of Millstream Drive (opposite the existing 250-space lot at the Stone Ridge Village Center). No additional residential uses are proposed. With respect to the road network, the subject ZCPA application would realign segments of South Point Drive (formerly Canary Grass Drive) to connect with Gum Spring Road (Existing Route 659), creating the potential for a continuous road connection for local traffic between Millstream Drive and the future West Spine Road without the need to access U.S. Route 50. Additionally, Millstream Drive (west of Stone Springs Boulevard) would be realigned to serve Landbay 7, connecting to Tall Cedars Parkway west of the proposed residential areas and would eliminate the need for a major floodplain crossing. A vicinity map and reduced version of the concept development plan are provided as *Attachment 2*. Access to the site is largely via the existing Stone Ridge internal road network. It is noted that Landbay 9, which would have been accessed via U.S. Route 50 opposite a new at grade intersection approved with the INOVA Dulles South Hospital Campus, has been removed from the applications.

This referral is based on review of materials received from the Department of Planning on June 22, 2009, including (1) a letter from the Applicant dated June 16, 2009 responding to second referral comments; (2) a revised statement of justification prepared by the Applicant dated June 16, 2009; (3) a revised draft proffer statement, dated June 16, 2009; (4) an

updated traffic impact study update prepared by Wells & Associates, LLC, dated June 16, 2009; and (5) a rezoning plan set (including a concept development plan (CDP)) prepared by Urban, Ltd., dated April 7, 2006 and revised through June 15, 2009. OTS staff also reviewed (6) the proffers and letter of clarification, dated October 5, 2005 and November 30, 2005, respectively, for the most-recently approved Stone Ridge rezoning application (ZMAP 2002-0013).

Review of Applicant's Revised Traffic Study

The Applicant's most recent traffic study (dated June 16, 2009) updates the previous (January 26, 2009) traffic study and includes the following changes/additions:

- Review of the revised proposed development program, including the removal of Landbay 9 from the subject applications, resulting in a reduction of the net increase in non-residential uses proposed from +2,424 sq ft to +133 sq ft
- Update of assumed future lane use and traffic control on Stone Springs Boulevard at Millstream Drive (Intersection 8) and Tall Cedars Parkway (Intersection 12)
- Inclusion of a proffer comparison between the most recent existing Stone Ridge approvals (ZMAP 2002-0013, approved in 2005) and the proposed applications

The study continues to assume site buildout in a single phase by 2015. Relevant portions of the revised traffic study are summarized below.

Road Network Analyzed by Revised Study

The Applicant's traffic study analyzed current and future traffic conditions, focusing on eight (8) existing intersections and adjacent roadway segments in and around Stone Ridge. Future road segments and intersections are shown as dashed lines on the graphic. Existing lane use and traffic control is illustrated on *Attachment 3*.

Existing Traffic Volumes and Intersection Levels of Service (LOS)

Attachment 4 illustrates existing daily and peak hour traffic volumes in the vicinity of the subject site. AM and PM peak hour traffic counts were taken at eight (8) intersections in the study area in 2008. Daily traffic volumes (VPD) shown on *Attachment 4* were estimated based on the assumption that PM peak hour traffic volumes represent 10% of daily traffic volumes.

Attachment 5 (Column 1) summarizes existing intersection LOS in the vicinity of the site. Under existing signalized control, both the Route 50/Stone Springs Boulevard intersection (Intersection 3) and the Route 50/Route 659 intersection (Intersection 4) operate at an overall unacceptable LOS in the AM peak hour, though certain individual movements at each intersection operate at unacceptable LOS in the PM peak hour. The Route 50/Loudoun County Parkway intersection (Intersection 6) operates at overall unacceptable LOS conditions in both the AM and PM peak hours with existing signalization.

Background Traffic Assumptions

The traffic study update includes background traffic from a total of 17 pending and/or approved developments in the surrounding area. The study assumes a 2% annual growth rate, which was applied to all turning movements for forecast year (2015) conditions. The study states that this rate was determined based on recent conversations with VDOT; OTS staff notes that the same growth rate was used in the December 2008 traffic study for the previously-proposed West Spine Plaza application (SPEX 2007-0029).

Trip Generation from Proposed Development

The proposed applications would result in approximately 275 additional weekday average daily trips (a 1% increase) beyond those generated by the currently approved Stone Ridge development program. This figure includes 63 additional AM peak hour trips (2% increase) and 34 additional PM peak hour trips (1% increase). These figures are illustrated on the trip generation comparison included as *Attachment 6*, and reflect adjustments in standard trip generation rates for (1) internal capture; (2) transportation demand management (TDM) measures, and (3) pass-by trips for approved retail uses, all based on previous Stone Ridge traffic studies and approvals.

Forecasted (2015) Traffic Volumes, Levels of Service (LOS), and Recommended Mitigation Measures

Attachments 7 & 8 illustrate the 2015 total future traffic volumes (i.e., background traffic plus site-generated traffic) for both the approved and proposed Stone Ridge development programs, respectively. Year 2015 total future peak hour intersection LOS for all 16 intersections in the study area is illustrated on *Attachment 5 (Columns 2 & 3)* for both the approved and proposed development programs, respectively. The total future lane use and traffic control necessary to achieve the peak hour LOS categories identified in *Attachments 7 & 8* are depicted in *Attachments 9 & 10*; lane configuration changes proposed by the subject applications are noted by asterisks.

Significant changes to the regional road network assumed by 2015 include (1) the completion of the West Spine Road between Tall Cedars Parkway and Route 50 (the West Spine Road will replace Gum Spring Road as the through traffic connection south of Route 50); (2) the completion of Stone Springs Boulevard extended north of Route 50; (3) the conversion Gum Spring Road north of Route 50 to a right-in, right-out only configuration, and (4) the addition of a third lane in each direction on Route 50 from just west of Stone Springs Boulevard (Intersection 3) east to Loudoun County Parkway (Intersection 6). These configurations are depicted on *Attachment 10*.

In 2015, under both the approved and proposed development programs, the updated traffic study indicates that several movements would operate at failing LOS in both the AM and PM peak hours at the Route 50/Stone Springs Boulevard intersection (Intersection 3) and at the Route 50/West Spine Road intersection (Intersection 5) (both intersections would be signalized). The signalized Route 50/Loudoun County Parkway intersection (Intersection 6) would continue to operate at overall failing LOS in both the AM and PM peak hours. The on-site Stone Springs Boulevard/Millstream Drive intersection (Intersection 8) would operate at

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acceptable LOS in both the AM and PM peak hours with the installation of a traffic signal and the opening of previously-constructed left and right turn lanes on Stone Springs Boulevard. The on-site Stone Springs Boulevard/Tall Cedars Parkway intersection (Intersection 12) would experience side street (Stone Springs Boulevard) delays (LOS E and F) during the AM and PM peak hours even with a four-way stop control remaining in place and the opening of all previously-constructed left and right turn lanes on Tall Cedars Parkway.

The study concludes that the proposed development program would result in similar conditions to those that would be realized under the approved development program, and contends that the improvements proffered with the existing Stone Ridge approvals, as well as those improvements proposed with the subject applications, effectively mitigate the transportation impacts of the proposed development.

Status of Transportation Issues/Comments

Staff comments from the first and second OTS referrals (dated October 10, 2006 and April 17, 2009, respectively), as well as the Applicant's responses (quoted directly from the January 27, 2009 and June 16, 2009 Applicant response letters) and current issue status, are provided below.

1. Initial Staff Comment (1st Referral, October 10, 2006): The application proposes to realign existing Gum Spring Road to create a T-intersection with a local road (Canary Grass Drive) approximately 300 feet south of the existing Gum Spring Road/Route 50 intersection, and proposes to remove the existing traffic signal and median crossover at the intersection of existing Gum Spring Road and Route 50, creating a right-in, right-out scenario to/from eastbound Route 50. This proposed right-in, right-out configuration is not acceptable as it is inconsistent with the adopted Revised Countywide Transportation Plan (Revised CTP), which calls for the ultimate condition of this segment of Route 50 to be limited access with grade separated interchanges at various locations, including the West Spine Road (approximately 1,000 feet to the east of the proposed right-in, right-out movement). The proposed right-in, right-out movement is not only inconsistent with the limited access policy but would also result in weave/merge conflicts with the future Route 50/West Spine Road interchange. A more acceptable configuration would be to extend Canary Grass Drive to tie into the east-west road (Southpoint Boulevard) approved as part of the adjacent Gum Spring Village Center development, with future access to the West Spine Road south of Route 50. The Applicant should coordinate this connection with Gum Spring Village Center.

Applicant's Response (January 27, 2009): *The application provides for the extension of former Canary Grass Drive (now South Point Drive) in the Gum Spring Village Center project. This street configuration is consistent with the eventual closure of the existing Route 659 and Route 50 intersection and median crossover.*

Issue Status (2nd Referral, April 17, 2009): OTS appreciates the revised road layout to connect Southpoint Drive from its existing terminus west to Millstream Drive. This connection will provide beneficial local access between Stone Ridge and the future West Spine Road without the need to access Route 50.

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OTS notes that the Route 50/Existing Route 659 (Gum Spring Road) intersection will ultimately be closed, and north-south through traffic will utilize the future West Spine Road. The decision regarding the timing of modifications or closure to the Route 50/Gum Spring Road intersection rests with VDOT as part of a larger operational review/analysis of the road network; the timing and extent of any modifications to this intersection and the Applicant's role/responsibility for any such modifications should be discussed with VDOT. Additionally, it is not clear if Gum Spring Road between Route 50 and Tall Cedars Parkway needs to be retained at all once the West Spine Road is constructed should all adjacent parcels have alternate access in place; further discussion with VDOT and other adjacent property owners is necessary.

Applicant's Response (June 16, 2009): *The Applicant has met with VDOT and OTS on this matter and does not object to the eventual closing of the Route 50/Gum Spring Road intersection. The Applicant has added Proffer II.4.d. with respect to this matter that was also addressed in the Glascock Field rezoning case. The Applicant also does not object to the vacation of Gum Spring Road between Southpoint Drive and Tall Cedars Parkway.*

Current Issue Status: As stated in previous referrals, OTS appreciates the revised road layout to connect Southpoint Drive from its existing terminus west to Millstream Drive. This roadway could serve as part of a larger local access connection between the West Spine Road and Stone Ridge in the future, depending on future development between the West Spine Road and existing Gum Spring Road (namely the West Spine Plaza site).

The new proffer (Proffer II.4.d.) referenced in the Applicant's June 16, 2009 response above states that the Applicant will not object to the closure of the existing median crossover and removal of the traffic signal at the Route 50/Gum Spring Road intersection and modification of the south side of the intersection to a right-in, right-out configuration by VDOT or others once certain other road improvements are in place. The Applicant's traffic study notes the potential for such a right-in, right-out access (pending future VDOT and County approvals) but does not analyze this configuration. OTS reiterates its position stated in previous referrals on these and other applications opposing new ingress and egress points along the future limited access segment of Route 50. Such access is not consistent with adopted County policy, which calls for the "consolidation and reduction of access points along Route 50" (CPAM 2005-0007, Arcola Area/Route 50 Comprehensive Plan Amendment, Transportation Policy 1). However, as also previously noted, given that this location is part of an existing public roadway, final authority on the reconfiguration or closure of this intersection rests with VDOT. Approval of the subject applications should not be construed as approval of a right-in, right-out access at this location.

OTS staff understands that the Applicant has no objection to the potential future vacation of the segment of existing Gum Spring Road between Southpoint Drive and Tall Cedars Parkway, but notes that any future vacation of this roadway is

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dependent, in part, on the availability of alternate access to all adjacent parcels on the west side of the West Spine Road.

2. Initial Staff Comment (1st Referral, October 10, 2006): Issues with right-of-way acquisition and construction of the proposed West Spine Road between Tall Cedars Parkway and Route 50 add additional complications and uncertainty to the interim and ultimate roadway configuration in this area. Although construction plans for a two-lane (northbound) section of the West Spine Road between Tall Cedars Parkway and Route 50 were approved by the County in 2002 (CPAP 2001-0184), no construction has commenced to date. No plans are currently on file for the remaining two (southbound) lanes of the West Spine Road between Route 50 and Tall Cedars Parkway. (Construction plans (CPAP-2002-0189) were approved by the County in 2004 for a four-lane section of Gum Spring Road from Tall Cedars Parkway south to Braddock Road, but no construction has commenced to date). It has been anticipated that existing Gum Spring Road and the West Spine Road would operate as a one-way pair of roads until all four lanes of the West Spine Road are completed between Tall Cedars and Route 50, but such a configuration has not been approved by VDOT. All approved construction plans show cul-de-sacs at both ends of the segment of existing Gum Spring Road between Tall Cedars Parkway and Route 50 (as envisioned by the currently-approved Stone Ridge development program and the approved Gum Spring Village Center special exception (SPEX 2003-0033, approved in 2004). Based on the anticipated cul-de-sacs at each end of this segment of Gum Spring Road, Gum Spring Village Center (as required by its SPEX condition of approval) has prepared and submitted to the County a traffic signal warrant study for its Southpoint Boulevard entrance onto Gum Spring Road, approximately 600 feet south of Route 50. The study finds that a traffic signal is not warranted at the proposed intersection. Given the situation with the West Spine Road and the likelihood that existing Gum Spring Road will remain open in its current condition for the foreseeable future, OTS strongly disagrees with this conclusion. Additional discussion and coordination on this matter and the overall status of the West Spine Road are necessary.

Applicant's Response (January 27, 2009): *We look forward to a meeting with OTS to discuss these matters.*

Issue Status (2nd Referral, April 17, 2009): As stated above, OTS appreciates the revised road layout to connect Southpoint Drive from its existing terminus at Gum Spring Road (Intersection 10) west to Millstream Drive. The timing of this connection is not specified in the subject application materials. Should this connection be made prior to the closure of Gum Spring Road south of Route 50, additional turn lanes and signalization would likely be necessary. Subsequent to the resolution of the larger road network issues identified in Comment #1 above, discussion on the timing of the Southpoint Drive connection is needed. OTS staff is available to meet with VDOT and the Applicant to discuss the timing of this connection and its relationship to the larger road network in the area.

Applicant's Response (June 16, 2009): *The Applicant will comply with all applicable VDOT requirements at the time Southpoint Drive is extended to Gum Spring Road.*

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Current Issue Status: OTS staff understands the uncertainty regarding the timing of future road improvements in this immediate vicinity, and appreciates the Applicant's response that it will comply with all applicable VDOT requirements at the time Southpoint Drive is extended to Gum Spring Road (Intersection 10). However, OTS recommends that a proffered commitment to this effect (i.e., necessary turn lanes and signalization) be included with these applications, along with a timing mechanism to ensure that the roadway will be available to serve the development proposed within Landbays FF1A and FF2B. See also Comment #10 below. OTS staff is available for further discussion on this matter.

3. Initial Staff Comment (1st Referral, October 10, 2006): While the Applicant's traffic study indicates that the existing Gum Spring Road/Route 50 signalized intersection operates at LOS E during the AM peak hour, other traffic studies recently submitted to the County (e.g., Arcola Center) indicate that the intersection operates at LOS F during both the AM and PM peak hours. An explanation/clarification of this discrepancy needs to be provided.

Applicant's Response (January 27, 2009): An updated traffic study is included with this submission.

Current Issue Status (2nd Referral, April 17, 2009): OTS appreciates the Applicant's traffic study update and has no further comments on this issue. Issue resolved.

4. Initial Staff Comment (1st Referral, October 10, 2006): Proffered improvements to Route 50 committed to as part of the previous Stone Ridge rezoning (ZMAP 2002-0013) should also be included with this proposal as "up front" improvements as the current application is also part of Stone Ridge and would add trips to the Route 50 corridor. These proffers include "up front" construction of the third eastbound lane of Route 50, roughly from Stone Ridge to Loudoun County Parkway (as described in ZMAP 2002-0013, Proffer II.B.3., November 30, 2005 Letter of Clarification), and improvements to the West Spine Road/Route 50 intersection (as described in ZMAP 2002-0013, Proffer II.B.4.(c), October 5, 2005 Proffer Statement).

Applicant's Response (January 27, 2009): The Route 50 improvements proffered with ZMAP 2002-0013 remain in effect and will not be changed by this Application.

Issue Status (2nd Referral, April 17, 2009): The Applicant is requested to confirm the approval status of the third Route 50 eastbound lane between the current terminus of the eastbound three-lane section (just west of Gum Spring Road) and the West Spine Road. See also Comment #9 below.

Applicant's Response (June 16, 2009): The plans for this road improvement have been approved by the County.

Current Issue Status: According to County records (LMIS), CPAP 2007-0135 was approved by the County on May 8, 2009. Issue resolved.

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5. Initial Staff Comment (1st Referral, October 10, 2006): Given existing and forecasted traffic volumes, grade-separated interchanges are an integral part to long-term transportation solutions in the Route 50 Corridor. Currently, a diamond interchange is envisioned at intersection of the West Spine Road and Route 50. The Applicant should provide a fair-share contribution towards this future improvement.

Applicant's Response (January 27, 2009): The existing Stone Ridge proffers, Proffer II.I., include a cash contribution commitment for regional transportation improvements. This Application does not change the existing commitment.

Current Issue Status (2nd Referral, April 17, 2009): See Comment #9 below.

6. Initial Staff Comment (1st Referral, October 10, 2006): Staff has no issues with proposed re-alignment of Millstream Drive, provided that the future east-west segment intersects with Route 659 Relocated at a point sufficiently south of the planned interchange of Route 659 Relocated and Route 50.

Applicant's Response (January 27, 2009): Comment acknowledged.

Current Issue Status (2nd Referral, April 17, 2009): The revised applications no longer propose this roadway alignment, and therefore this comment is no longer applicable. Issue resolved.

7. Initial Staff Comment (1st Referral, October 10, 2006): The inclusion of 307 additional residential units as part of this application appears to be a reversal of Board action taken with the previous Stone Ridge rezoning (ZMAP 2002-0013), in which 216 residential units were eliminated and approximately 200,000 sq ft of non-residential uses were instead retained.

Applicant's Response (January 27, 2009): The Application has been revised to relocate previously approved residential units within the Property, but does not request an increase in the number of approved residential units. A modest increase in the amount of non-residential floor area is requested.

Current Issue Status (2nd Referral, April 17, 2009): The revised applications no longer propose additional residential units beyond previous approvals, and therefore this comment is no longer applicable. Issue resolved.

8. Initial Staff Comment (1st Referral, October 10, 2006): An appropriate transit contribution should be provided for the 307 residential units proposed on site.

Applicant's Response (January 27, 2009): As noted above, the revised Application proposes no increase in the number of previously approved residential units.

Current Issue Status (2nd Referral, April 17, 2009): The revised applications no longer propose additional residential units beyond previous approvals, and therefore this comment is no longer applicable. Issue resolved.

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New Issues (Initially Raised in Second Referral)

9. Initial Staff Comment (2nd Referral, April 17, 2009): The Applicant is requested to provide a comparison of the transportation improvements proposed with the subject applications with those improvements proffered as part of previous Stone Ridge approvals.

Applicant's Response (June 16, 2009): *This comparison is provided in the revised TIA as requested.*

Current Issue Status: The proffer comparison included in the June 16, 2009 traffic study is provided as **Attachment 11**. Issue resolved.

10. Initial Staff Comment (2nd Referral, April 17, 2009): The Applicant should commit to implement/construct the on-site "proffered" and "site" improvements identified in the updated traffic study for the proposed development program (see **Attachment 10** [in the 2nd OTS Referral]). The study indicates that these improvements are necessary to realize the forecasted peak hour intersection LOS conditions presented.

Applicant's Response (June 16, 2009): *The proffers for the proposed development program commit to implementing/constructing both the "proffered" and "site" improvements.*

Current Issue Status: The current and/or previous proffer statements for Stone Ridge contain specific commitments for many of the on-site "proffered" and "site" improvements shown in **Attachment 10** of the traffic study. However, two items do not appear to be addressed, namely (1) a commitment to construct an additional lane on northbound Stone Springs Boulevard at Route 50 (Intersection 3) (the traffic study assumes a total of four lanes (one left, one through, and two right), but only three lanes (one left and two right) are currently constructed), and (2) a commitment to construct necessary improvements at the future intersection of Stone Springs Boulevard at Gum Spring Road (Intersection 10) (turn lanes and signalization) at the time the connection is made; this is particularly relevant if the connection is made while Gum Spring Road is still open to through traffic (see Comment #2 above). OTS recommends that such commitments be included in the current proffer statement.

11. Initial Staff Comment (2nd Referral, April 17, 2009): Future traffic control at the intersections of Stone Springs Boulevard and Millstream Drive (Intersection 8) and Stone Springs Boulevard and Tall Cedars Parkway (Intersection 12) requires further clarification and discussion. Both of these intersections currently operate at acceptable LOS during both the AM and PM peak hours under four-way stop control. The Applicant's updated traffic study indicates that stops signs are proposed to be removed from the side streets at both intersections, resulting in two-way stop control with AM and PM peak hour LOS F conditions on the side streets. The Applicant should provide traffic signal warrant studies for each of these intersections, and agree to install the signals if and when warranted. It is unclear from the draft proffers whether the existing on-site signalization proffer (Proffer II.F.) is proposed to be retained with the subject applications. It is noted that VDOT

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requested traffic signal warrant studies at both of these intersections during its recent review of the now-approved Healthsouth Rehabilitation Hospital (SPEX 2008-0018) on Millstream Drive, and that the Healthsouth application includes conditions of approval requiring the addition of an eastbound left turn lane on Millstream Drive at Stone Springs Boulevard, as well as a fair-share contribution to a future traffic signal at that location.

Applicant's Response (June 16, 2009): *The existing on-site signalization proffer (Proffer II.F.) is being retained. However, the revised proffers include a provision for an updated traffic signal warrant study for the Millstream Drive/Stone Springs Boulevard intersection and a contribution of \$250,000 if a signal is warranted.*

Current Issue Status: The revised traffic study assumes a traffic signal will be installed at the Stone Springs Boulevard/Millstream Drive intersection (Intersection 8), and indicates that a signal will result in acceptable LOS at this location. The draft proffer statement includes language stating that a signal warrant study will be conducted during site plan review for Landbay EE2A (adjacent to this intersection), and if warranted, the Applicant will contribute \$250,000.00 towards the design, construction, and installation of the signal. OTS staff appreciates this commitment, but recommends that the proffer language be revised to state that the signal be installed by the Applicant concurrent with the development of Landbay EE2A if warranted at that time, if warranted. If not warranted at that time, a total of \$300,000.00 (the County's current cost of a four-by-four signal) should be contributed toward future design, construction, and installation of the signal.

The Applicant did not respond to OTS staff's previous request for a warrant analysis at the Stone Springs Boulevard/Tall Cedars Parkway intersection (Intersection 12), and OTS notes that even with the retention of a four-way stop at this location, side street volumes are still forecast to operate at failing LOS (LOS E and F) during AM and PM peak hours. Consistent with VDOT's July 21, 2009 comment, OTS staff recommends that the Applicant conduct a signal warrant analysis at this intersection, install a signal if warranted, or if a signal is not warranted, contribute the County's current cost (\$300,000.00) of future design, construction, and installation of a signal at this intersection.

12. Initial Staff Comment (2nd Referral, April 17, 2009): The Applicant intends to access Landbay 9 via Route 50 at the proposed INOVA Boulevard intersection/median crossover (Intersection 2) to be constructed and signalized as part of the approved INOVA Dulles South Hospital Campus (SPEX 2006-0012). Ultimately, this segment of Route 50 (east of future Route 659 Relocated (Northstar Boulevard)) is planned to be converted to a limited access facility. To this end, the INOVA Hospital SPEX includes a condition of approval requiring that INOVA's direct access to Route 50 be terminated at such time the Route 50 North Collector Road and Route 659 Relocated (Northstar Boulevard) are constructed and open for public use and provide access to Route 50. As part of this application, OTS recommends a similar commitment from Stone Ridge to terminate direct Route 50 access to Landbay 9 at such time as Route 659 Relocated (Northstar Boulevard) is in place and provides access to Route 50. The Applicant should indicate an alternate means of access to Landbay 9.

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Applicant's Response (June 16, 2009): Land Bay 9 and its Route 50 access have been removed from the Application.

Current Issue Status: The revised applications no longer include Landbay 9, and therefore this comment is no longer applicable. Issue resolved.

13. Initial Staff Comment (2nd Referral, April 17, 2009): The Applicant is requested to clarify the intent/status of the text on the plan set indicating "Alternate Private Access Road" from Landbay 9 north to Route 50.

Applicant's Response (June 16, 2009): Land Bay 9 and its Route 50 access have been removed from the Application.

Current Issue Status: The revised applications no longer propose this access, therefore this comment is no longer applicable. Issue resolved.

14. Initial Staff Comment (2nd Referral, April 17, 2009): OTS appreciates the Applicant's proposed commitment to construct/bond for construction the eastern two lanes of Route 659 Relocated (Northstar Boulevard) between Tall Cedars Parkway and the southern Stone Ridge property line. This is a new commitment beyond the proffers approved with ZMAP 2002-0013. However, given that VDOT will not accept a half section of roadway without a guarantee from the County that the remaining half section will be constructed without VDOT funding, OTS requests that the Applicant commit to construct a four-lane divided roadway in a configuration that will accommodate future expansion to a six-lane divided section (as called for in the 2001 Revised CTP).

Applicant's Response (June 16, 2009): The Applicant understands that it may be responsible for maintaining the half section until the road is accepted by VDOT. The offered half section is consistent with the commitment of the C.D. Smith rezoning immediately to the south, and will complete a network of interconnecting public streets consisting of Northstar Boulevard, Tall Cedars Parkway, Gum Spring Road and Braddock Road.

Current Issue Status: OTS staff appreciates the Applicant's explanation that the proposed half-section is consistent with improvements proffered with approved rezonings to the south. The Applicant should language in the proffer statement acknowledging responsibility for maintenance of all public roads on site until the roads are accepted into the VDOT system. Issue resolved, subject to inclusion of such language.

15. Initial Staff Comment (2nd Referral, April 17, 2009): OTS has no objection to the realignment of Millstream Drive as proposed with these applications.

Applicant's Response (June 16, 2009): Comment acknowledged.

Current Issue Status: Issue resolved.

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Additional Comments

16. In response to a County request, the applications now include (per Proffer III.G.4) a 100-space commuter parking lot on the south side of Millstream Drive (on Public Use Site #4, opposite the existing 250-space commuter parking lot at the Village Center at Stone Ridge). Such a facility is included in the County's current Capital Improvements Program (CIP). OTS staff recommends that the proffer language be revised to state that a minimum of 100 spaces be allowed on the site, so that additional spaces may be constructed within Public Use Site #4 as site constraints and funding allow. OTS staff appreciates the Applicant's efforts in this regard.

Conclusion

Subject to resolution of the issues identified above, OTS would not object to the approval of these applications. OTS staff is available to meet with the Applicant and VDOT for further discussion.

ATTACHMENTS

1. Stone Ridge Land Use Summary (Existing and Proposed Totals) (Traffic Study Table 1)
2. Vicinity Map (Traffic Study Figure 1) and Concept Development Plan
3. Existing (2008) Lane Use and Traffic Control and Peak Hour LOS (Traffic Study Figure 4)
4. Existing (2008) Traffic Volumes (Traffic Study Figure 3)
5. Intersection LOS Summary (Existing, Currently-Approved Program, and Proposed Program Scenarios) (Traffic Study Table 2)
6. Trip Generation Comparison Table (Traffic Study Table 5) and Chart
7. Future (2015) Approved Program Traffic Forecasts (Traffic Study Figure 8)
8. Future (2015) Proposed Program Traffic Forecasts (Traffic Study Figure 9)
9. Future (2015) Approved Program Lane Use and Traffic Control and Peak Hour LOS (Traffic Study Figure 6)
10. Future (2015) Proposed Program Lane Use and Traffic Control and Peak Hour LOS (Traffic Study Figure 7)
11. Comparison of Existing vs. Proposed Stone Ridge Transportation Proffers

cc: Andrew Beacher, Assistant Director, OTS
Nancy Gourley, Transit Division Manager, OTS
John Bassett, Transportation Engineer, VDOT
Tom Walker, Senior Transportation Engineer, VDOT

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Table 1
Stone Ridge Commercial
Land Use Summary (1)(2)(3)

Land Use	Existing Totals	Units	Proposed Totals	Units	Total Change	Units
Single-Family Detached	853	D.U.	853	D.U.	-	D.U.
Townhouse/Condominium	1,741	D.U.	1,741	D.U.	-	D.U.
Multi-Family	<u>671</u>	D.U.	<u>671</u>	D.U.	-	D.U.
Total Residential	3,265	D.U.	3,265	D.U.	-	D.U.
Retail	316,378	S.F.	316,378	S.F.	-	S.F.
Office (PD-OP/CLI)	282,563	S.F.	390,872	S.F.	108,309	S.F.
Light Industrial (PD-IP)	570,250	S.F.	462,074	S.F.	(108,176)	S.F.
Total Commercial/Employment	1,169,191	S.F.	1,169,324	S.F.	133	S.F.

Notes: (1) Total Change based on densities provided by Urban Engineering, dated June 4, 2009.

(2) Proposed and Existing Totals based on the overall Approved Stone Ridge Development

(3) CLI was assumed as office for purpose of comparison and trip generation analysis.

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Wells + Associates, Inc.
McLean, Virginia

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Figure 1
Site Location



Stone Ridge Commercial
Loudoun County, Virginia

ATTACHMENT 2



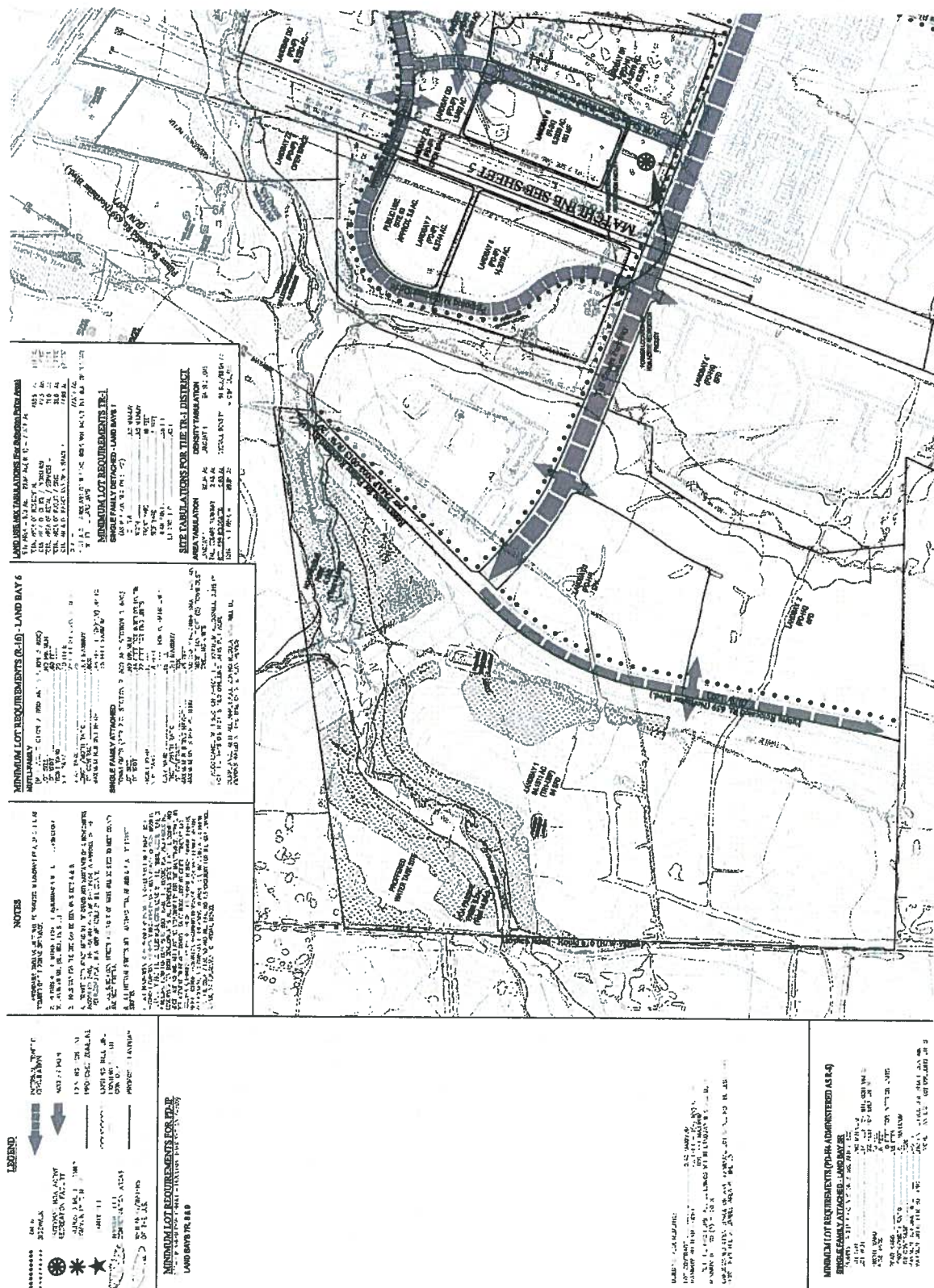
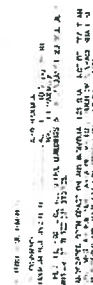


Figure 2A
Conceptual Site Plan

Plan Provided By
Urban, Ltd.





Plan Provided By
Urban, Ltd.



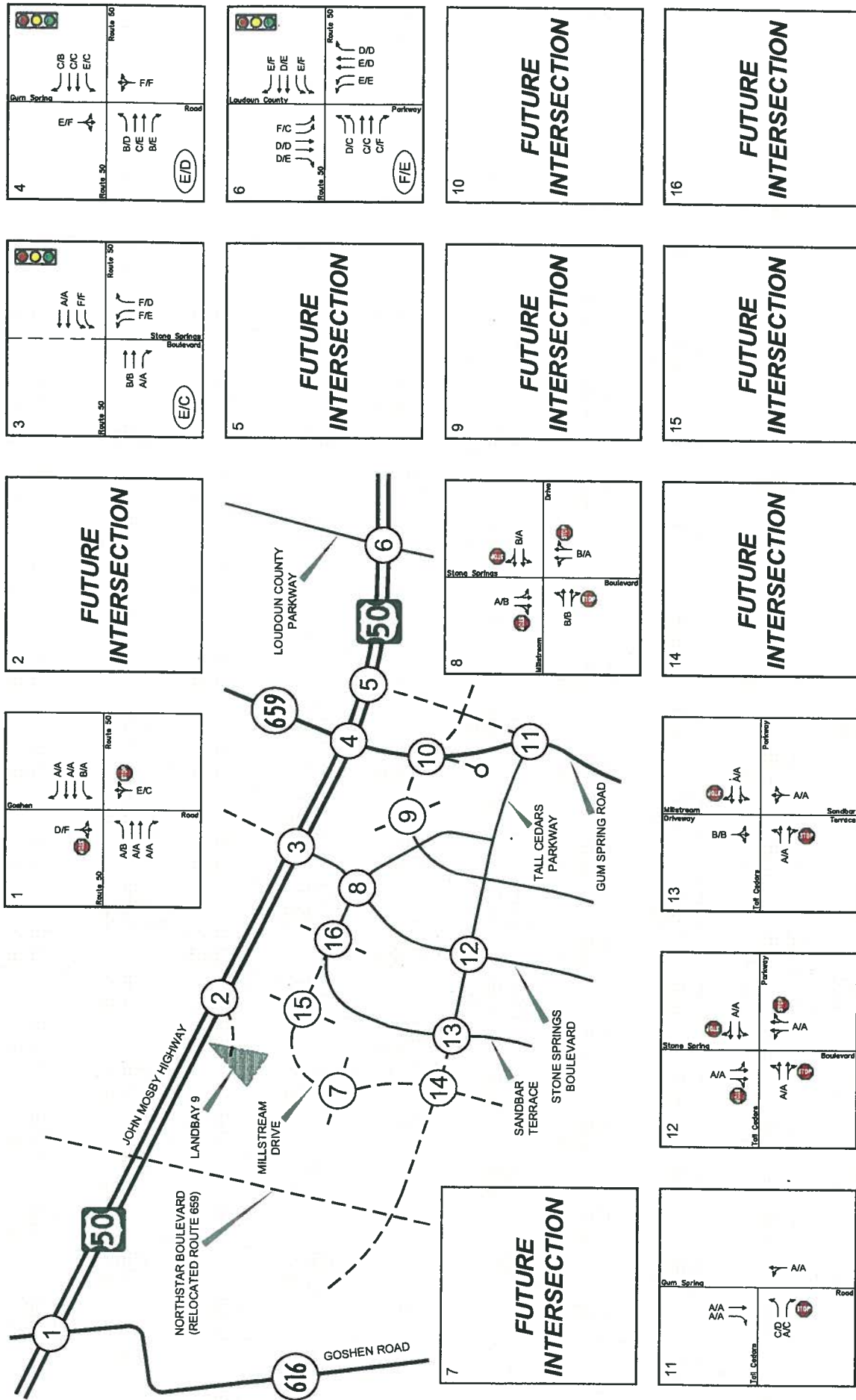


Figure 4
Existing Lane Use and Traffic Control and
Peak Hour Levels of Service

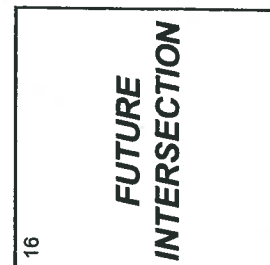
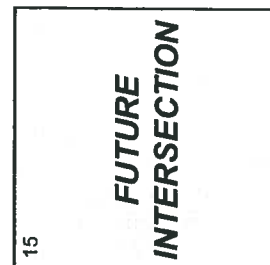
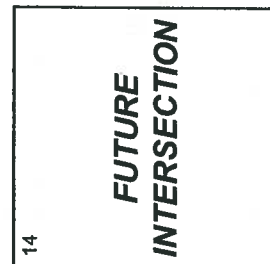
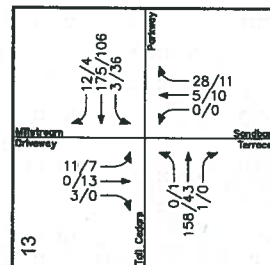
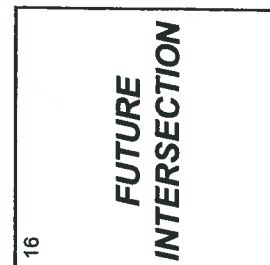
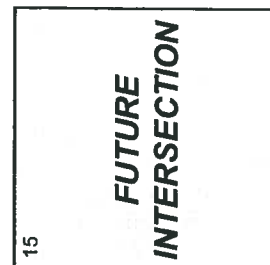
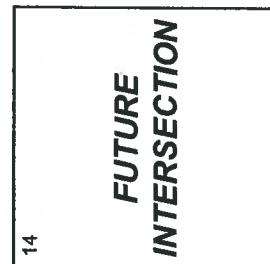
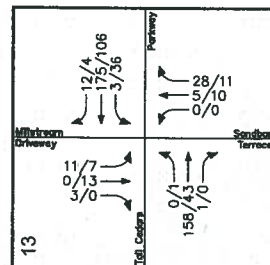
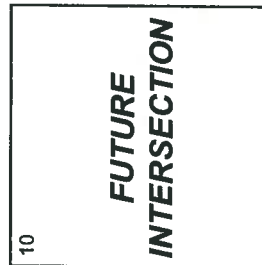
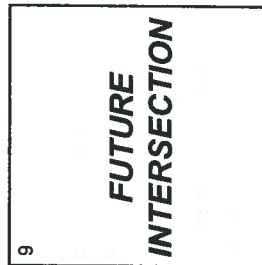
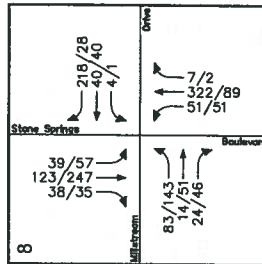
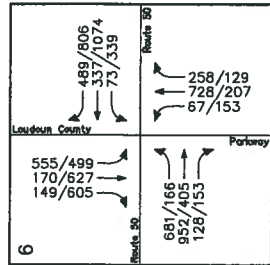
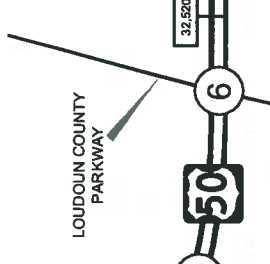
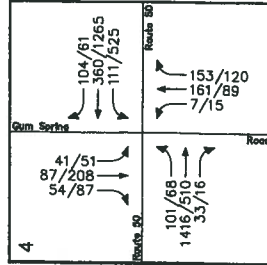
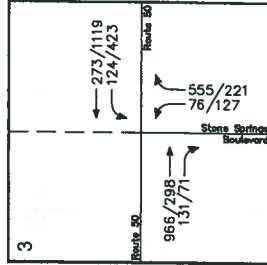
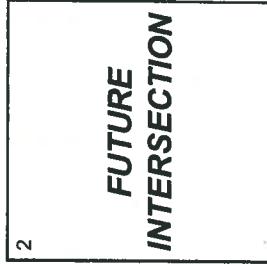
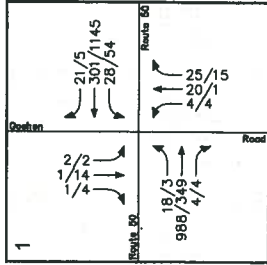
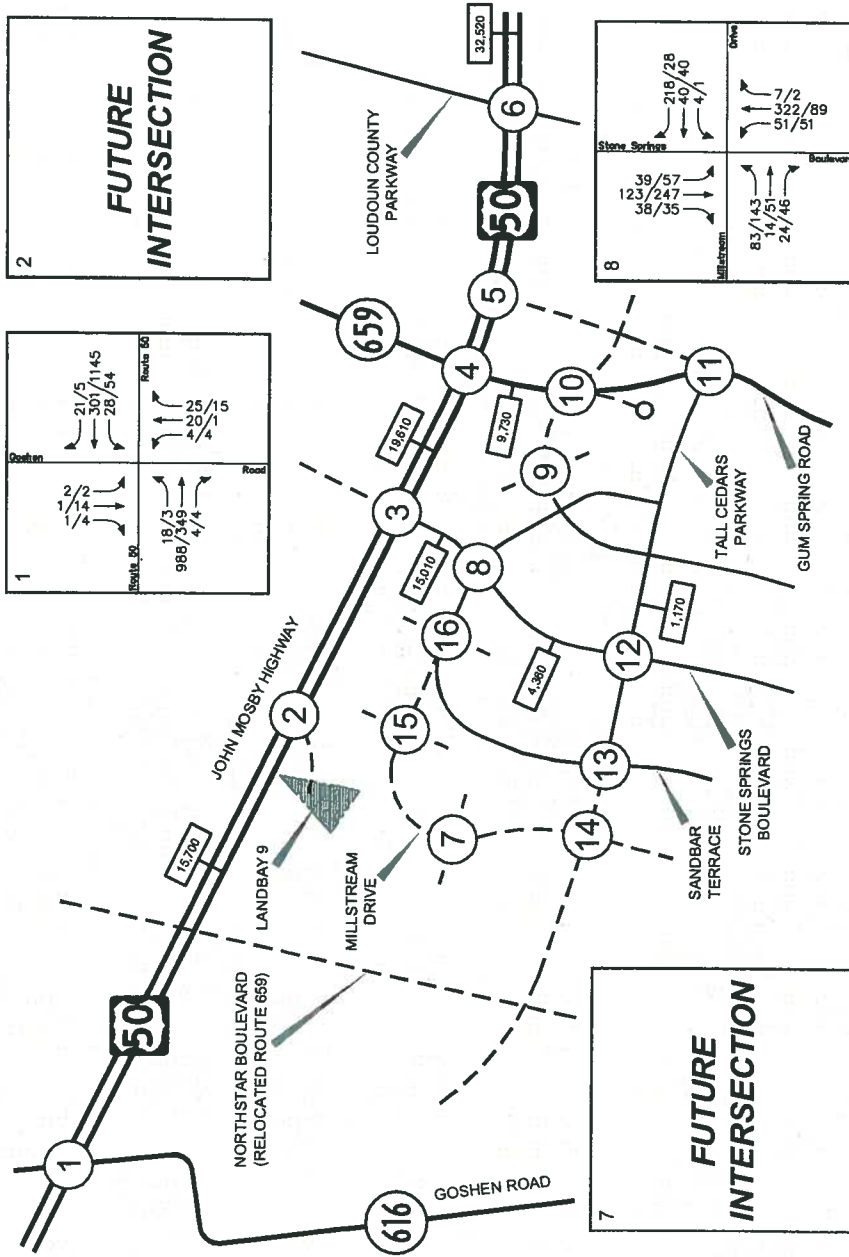


Figure 3
Existing Peak Hour Traffic Volumes

ADT Average Daily Trips

PM PEAK HOUR

000/000

North

Table 3-1
Stone Ridge Commercial
Intersection Level of Service Summary (1) (2) (3)

Intersection	Intersection Control	Critical Movement	2008		2015	
			Existing		Currently Approved Program	
			AM	PM	AM	PM
(1) U.S. Route 50/ Goshen Road	Stop Sign.	EBL WBL NBLTR SBLTR	A [8.1] B [11.0] E [35.2] D [27.8]	B [11.7] A [8.3] C [17.6] F [58.9]	N/A	
Background Improvement: Install Signal, Add NBR, Optimize Timings (by others)	Signal	EBL EBT EBR WBL WBT WBR NBLT NBR SBLTR Overall	N/A		B [11.3] C [24.6] B [12.5] C [20.9] B [11.4] A [9.3] D [48.6] C [29.6] <u>D [35.2]</u> C [23.5]	B [16.3] C [24.7] B [11.1] A [7.9] B [18.9] A [6.9] D [41.8] C [26.7] <u>D [38.5]</u> B [18.7]
(2) U.S. Route 50/ Racefield Ln/ INOVA Driveway	Signal	EBL EBT WBT WBR SBL SBR Overall	N/A		A [4.5] A [8.3] B [11.1] B [10.2] C [26.7] <u>B [18.2]</u> A [10.0]	B [15.8] A [8.2] B [19.6] B [11.2] D [53.5] <u>C [32.1]</u> B [19.6]
(3) U.S. Route 50/ Stone Spings Blvd	Signal	EBT EBR WBL WBT NBL NBR Overall	B [11.7] A [8.5] F [93.3] A [0.2] F [80.5] <u>E [210.1]</u> E [69.1]	B [10.1] A [9.4] F [92.7] A [0.5] E [64.7] <u>D [42.1]</u> C [27.0]	N/A	
Background Improvement: Add SB Leg Optimize Timings, Add NB Lanes Add Through Lanes On Rt. 50.	Signal	EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Overall	N/A		C [23.2] D [35.1] C [27.5] E [63.9] C [22.4] C [20.7] D [41.5] D [53.3] E [59.6] E [73.2] E [65.0] <u>D [51.7]</u> D [43.0]	E [74.9] D [45.5] D [39.4] E [58.9] D [42.9] C [26.9] E [72.1] E [57.4] D [47.3] E [71.7] F [85.5] <u>D [51.2]</u> D [52.6]
(4) U.S. Route 50/ Gum Spring Rd (VA 659Y)	Signal	EBL EBT EBR WBL WBT WBR NBLTR SBLTR Overall	B [12.0] C [29.8] B [13.3] E [57.0] C [22.6] C [20.8] F [247.4] <u>E [78.2]</u> E [58.7]	D [42.8] E [74.8] E [71.7] C [24.5] C [31.4] B [11.2] F [130.1] <u>F [108.5]</u> D [54.0]	N/A	
Background Improvement: Remove Signal Remove NB Leg, R/R/O Only (by others)	Stop Sign	SBR	N/A		B [10.3]	A [9.7]
(5) U.S. Route 50/ West Spine Road	Signal	EBT EBR WBL WBT NBL NBR Overall	N/A		D [51.3] A [8.9] D [54.5] A [8.4] D [43.7] <u>D [40.4]</u> D [38.3]	D [54.6] C [22.5] D [53.0] A [8.6] D [48.2] <u>C [23.1]</u> C [32.3]
(6) U.S. Route 50/ Loudoun County Pkwy (Old Ox Road)	Signal	EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Overall	D [54.4] C [32.8] C [22.9] E [65.8] D [46.9] F [98.6] E [65.8] E [62.3] D [45.6] F [528.2] D [41.9] <u>D [40.8]</u> F [110.7]	C [30.0] C [25.8] F [103.0] F [80.7] E [58.7] F [87.3] E [64.1] D [41.7] D [40.0] C [30.9] D [47.6] <u>E [74.8]</u> E [59.3]	F [171.8] D [37.1] C [26.3] F [85.9] E [68.1] F [295.0] F [86.7] F [266.6] F [82.3] F [353.2] D [46.6] <u>D [50.5]</u> F [150.0]	F [335.0] D [41.0] C [31.6] E [74.5] E [65.1] F [277.7] E [65.9] E [70.7] D [54.2] E [74.7] F [174.3] <u>E [224.5]</u> F [235.3]
(7) Millstream Dr/ Land Bay 7 Driveway	Stop Sign	EBLR WBLR NBLT SBLT	N/A		B [12.6] N/A A [7.5] N/A	F [65.1] N/A A [5.8] N/A

Notes: (1) Analyses based on Synchro 7.
(2) Numbers in parentheses indicate average delay in seconds per vehicle for signalized intersections.
(3) Numbers in brackets indicate average delay in seconds per vehicle for stop sign controlled intersections.

Wells + Associates, Inc.
McLean, Virginia

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Table 2-2
Stone Ridge Commercial
Intersection Level of Service Summary (1) (2) (3)

Intersection	Intersection Control	Critical Movement	2008		2015			
			Existing		Currently Approved Program		Proposed Program	
			AM	PM	AM	PM	AM	PM
(8) Stone Springs Blvd/ Millstream Drive	Stop Sign 4-way	EB WB NB SB	B [10.1] B [11.6] B [11.5] A [9.7]	B [10.5] A [8.3] A [9.1] B [10.0]	C [19.6] F [57.4] E [37.8] D [31.6]	F [175.7] F [98.2] E [37.1] F [80.7]	C [20.6] F [55.9] E [37.4] D [33.5]	F [141.0] F [61.7] C [22.8] F [59.6]
Background Improvement: Site Improvement: Install Signal	Signal	EBLTR WBLTR NBL NBT NBR SBL SBT SBR Overall	N/A		C (23.5) C (21.8) B (13.1) C (20.2) B (15.8) B (10.6) B (12.0) B (11.9) B (17.4)	D (38.5) B (15.8) C (34.1) C (31.2) C (28.5) C (24.7) D (42.7) C (29.4) C (32.5)	C (24.3) C (21.9) B (13.8) C (21.0) B (16.5) B (11.1) B (12.5) B (12.2) B (18.1)	C (30.0) B (14.8) C (26.6) C (30.0) C (27.4) C (20.7) C (34.2) C (25.8) C (27.1)
(9) Southpoint Dr/ Site Office/Residential	Stop Sign	EBLTR WBLTR NBLTR SBTR	N/A		B [12.2] N/A A [6.8] A [0.0]	B [11.2] N/A A [6.6] A [0.0]	A [6.6] A [0.2] C [20.0] B [10.2]	A [4.3] A [1.8] C [21.8] B [12.4]
(10) Gum Spring Rd/ Southpoint Dr.	Stop Sign	EBT WBT	N/A		N/A		A [0.0] A [0.0]	A [0.0] A [0.0]
(11) Gum Spring Rd/West Spine Road/ Tall Cedars Pkwy	Stop Sign	EBL EBR NBTL	C [19.6] A [9.7] A [3.6]	D [31.3] C [21.6] A [4.1]	N/A		N/A	
Background Improvement: Install Signal Realign with West Spine Road Add NB/SB Through Lane	Signal	EBL EBR NBL NBT SBT SBR Overall	N/A		C (25.1) A (8.1) A (6.8) A (5.1) C (23.8) B (13.5) B (10.8)	D (40.5) D (51.5) D (42.4) A (6.8) D (35.9) A (7.3) C (31.1)	C (25.9) A (8.0) A (6.4) A (4.8) C (24.7) B (14.5) B (10.7)	D (38.1) D (50.3) D (43.0) A (7.2) D (38.1) A (7.1) C (32.0)
(12) Stone Springs Blvd/ Tall Cedars Pkwy	Stop Sign 4-way	EB WB NB SB	A [9.0] A [8.3] A [9.5] A [8.3]	A [7.7] A [7.5] A [7.8] A [7.9]	C [15.2] C [15.8] E [47.2] C [16.9]	B [12.5] B [13.7] C [19.0] F [61.5]	B [14.6] C [15.2] E [42.2] C [16.4]	B [12.2] B [13.6] C [18.7] F [60.2]
(13) Tall Cedars Pkwy/ Millstream Drive/Sandbar Terrace	Stop Sign	EBL WBL NBLTR SBLTR	A [0.0] A [0.3] A [9.4] B [10.9]	A [0.3] A [3.1] A [9.6] B [10.8]	A [8.5] A [8.1] C [20.7] D [25.7]	A [7.9] A [7.6] B [11.5] C [19.4]	A [8.4] A [8.1] C [19.3] C [22.8]	A [7.8] A [7.8] B [11.5] C [15.2]
(14) Tall Cedars Pkwy/ Millstream Extended	Stop Sign	EBL WBL NBLTR SBLTR	N/A		N/A		A [7.5] A [7.4] A [9.4] B [10.1]	A [0.0] A [7.3] A [9.7] B [12.6]
(15) Millstream Extended/ Industrial Drive A	Stop Sign	EBLTR WBLTR NBLTR SBLTR	N/A		N/A		A [1.4] A [0.1] A [9.5] B [10.4]	A [0.6] A [1.5] B [10.7] B [11.4]
(16) Millstream Extended/ Industrial Drive B	Stop Sign	EBLTR WBLTR NBLTR SBLTR	N/A		N/A		A [0.2] A [0.4] A [9.0] B [11.1]	A [0.1] A [1.8] A [9.3] B [13.1]

Notes: (1) Analyses based on Synchro 7.
(2) Numbers in parentheses indicate average delay in seconds per vehicle for signalized intersections.
(3) Numbers in brackets indicate average delay in seconds per vehicle for stop sign controlled intersections.

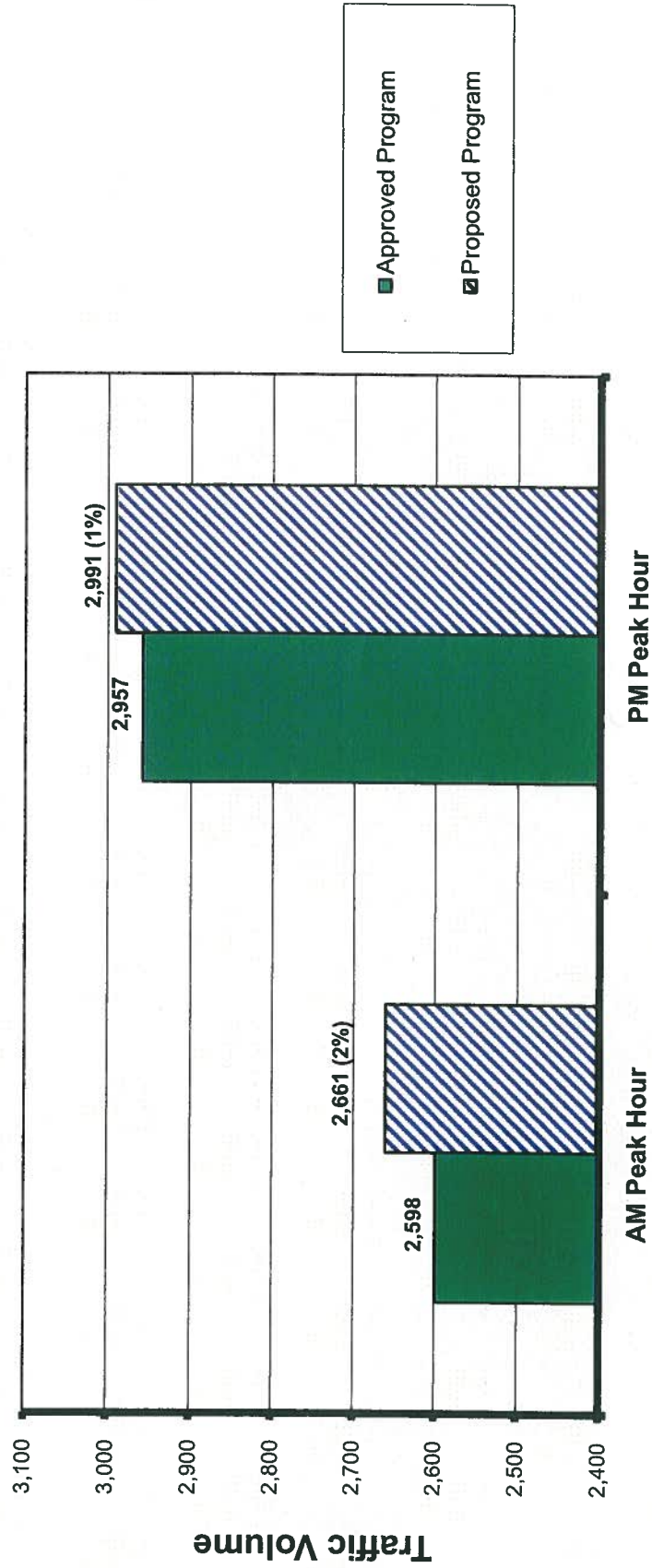
Wells + Associates, Inc.
McLean, Virginia

Table 5
Stone Ridge Commercial
Trip Generation Comparison

Program	AM Peak Hour			PM Peak Hour			Average Daily Traffic
	In	Out	Total	In	Out	Total	
Approved Program	1,286	1,312	2,598	1,419	1,538	2,957	39,817
Proposed Program	1,344	1,317	2,661	1,422	1,569	2,991	40,092
Difference	58	4	63	3	31	34	275
Percentage	5%	0%	2%	0%	2%	1%	1%

Notes: (1) Trip generation based on Institute of Transportation Engineers Trip Generation, 7th Edition.

Stone Ridge Commercial Trip Generation Comparison



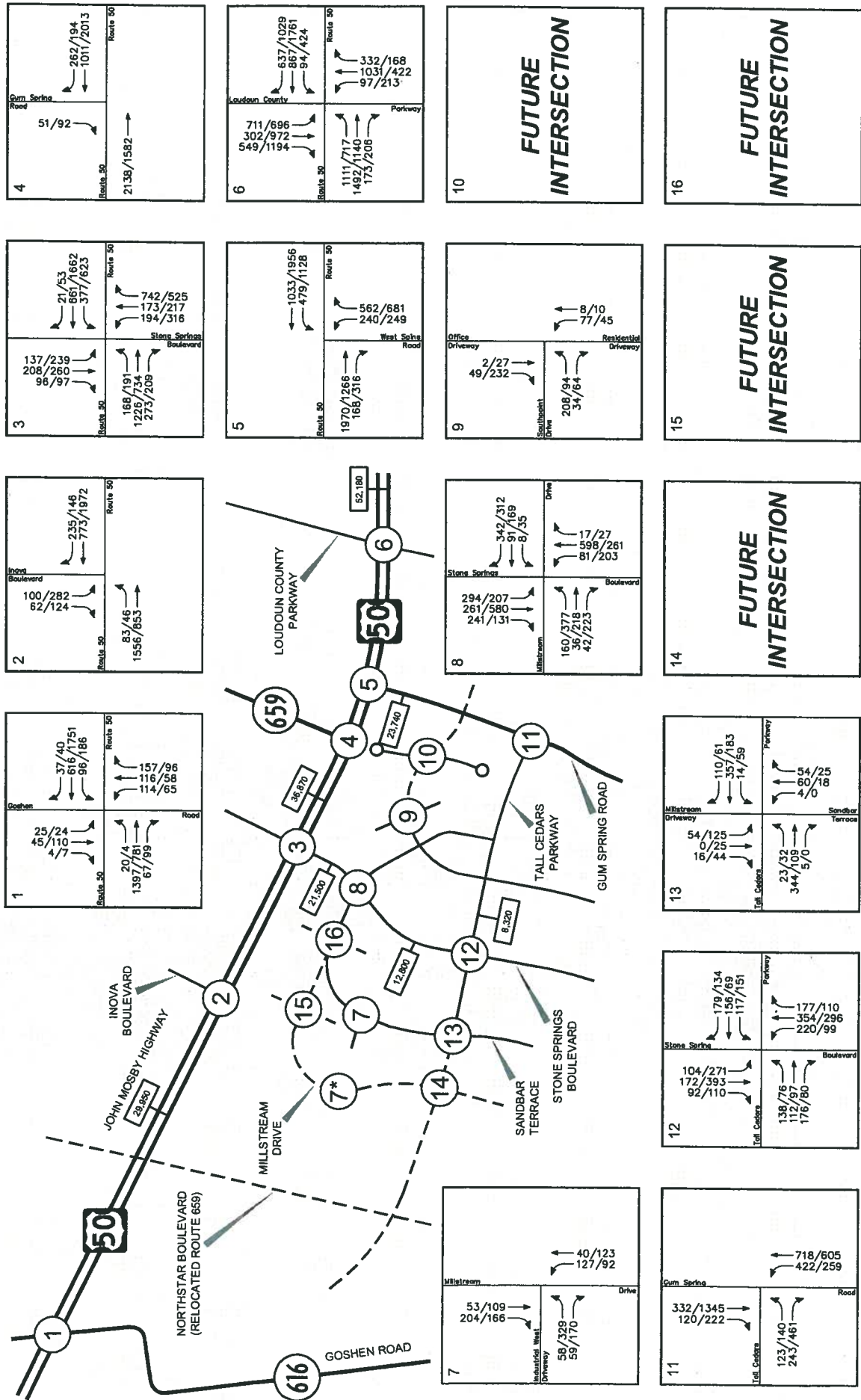


Figure 8
2015 Future Approved Traffic Forecasts

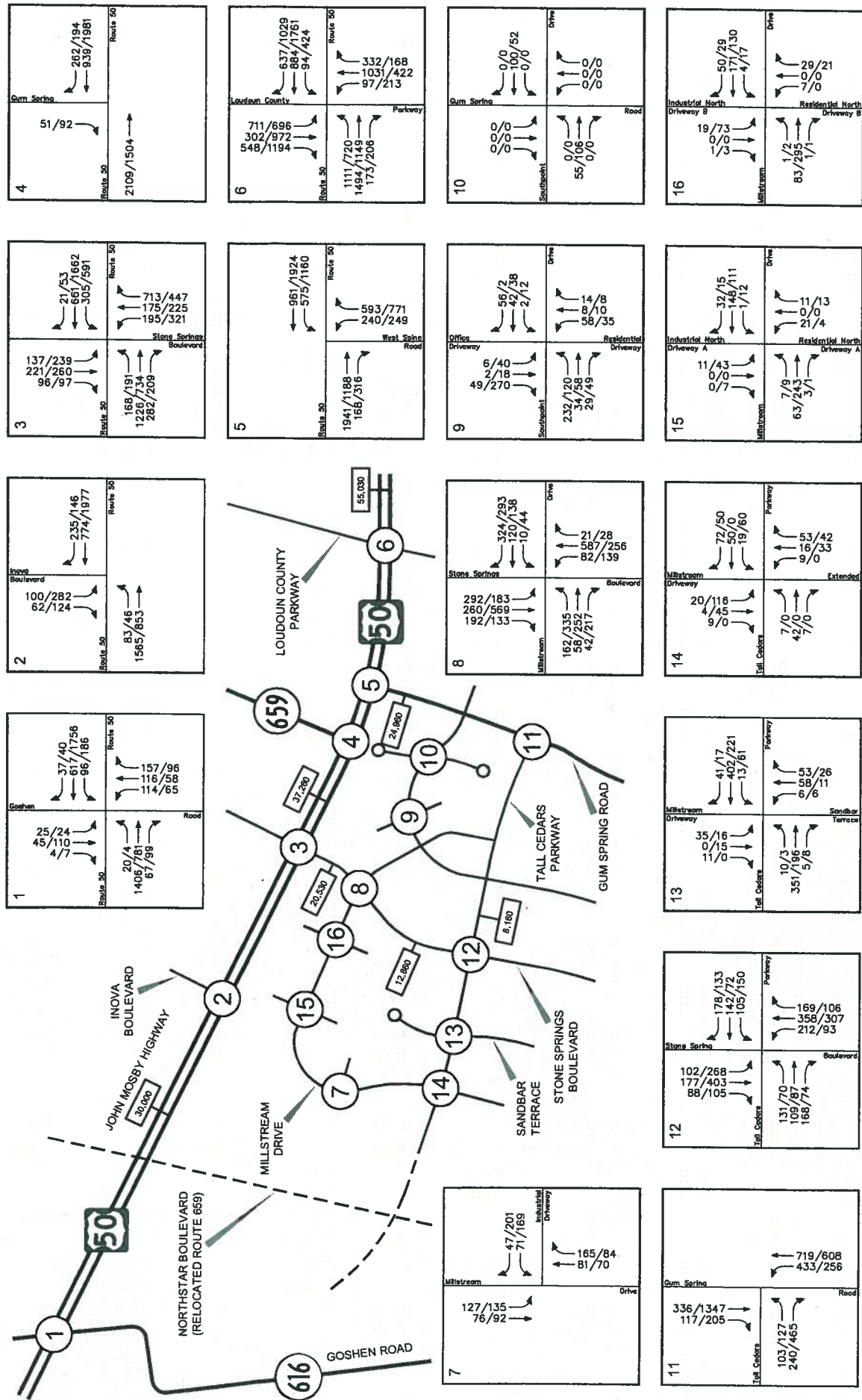


Figure 9
2015 Future Proposed Traffic Forecasts

ADT: Average Daily Trips
*: Location of Future Intersection

North
PM PEAK HOUR
000/000

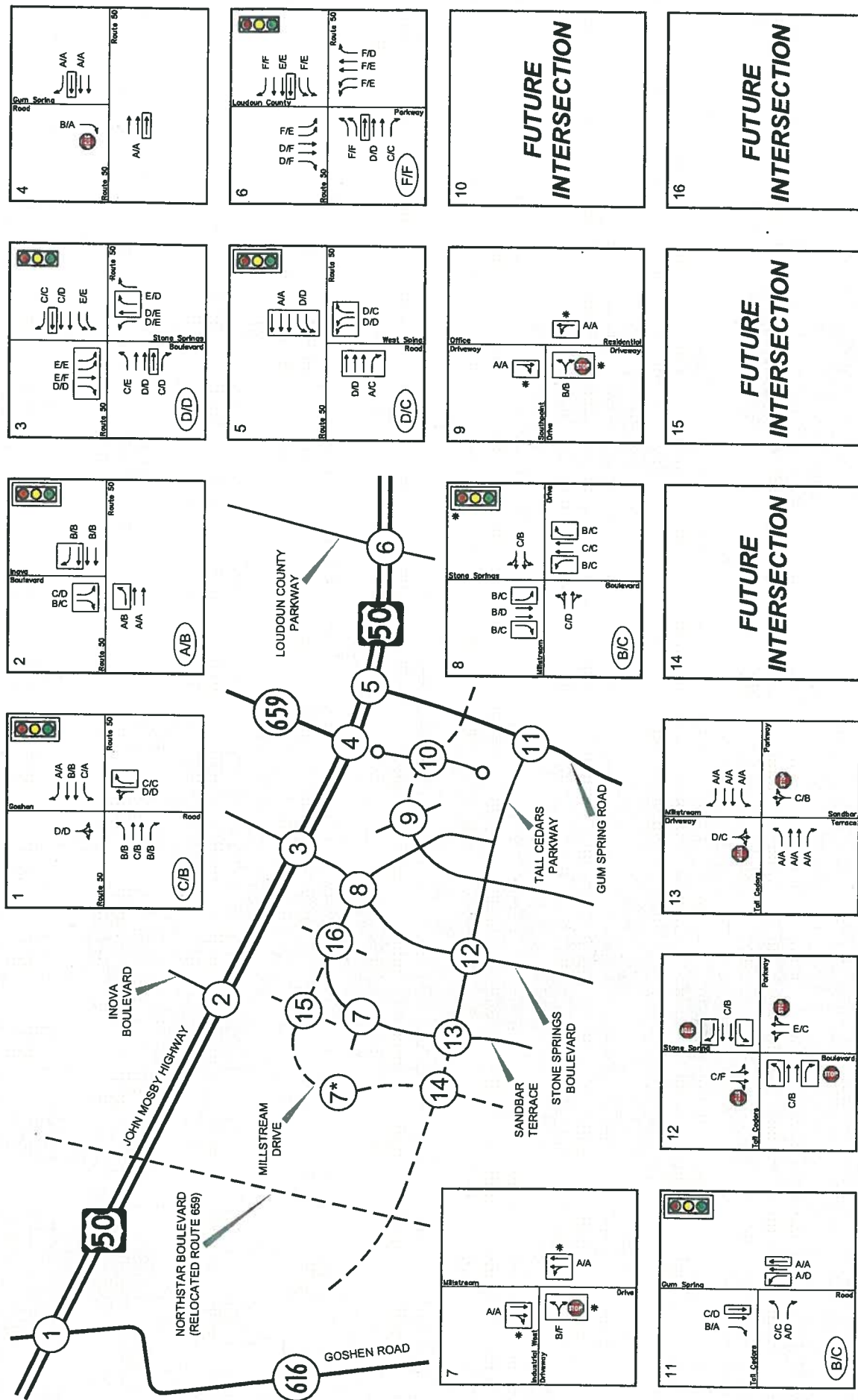


Figure 6
Future Approved Lane Use and Traffic Control and
Peak Hour Levels of Service

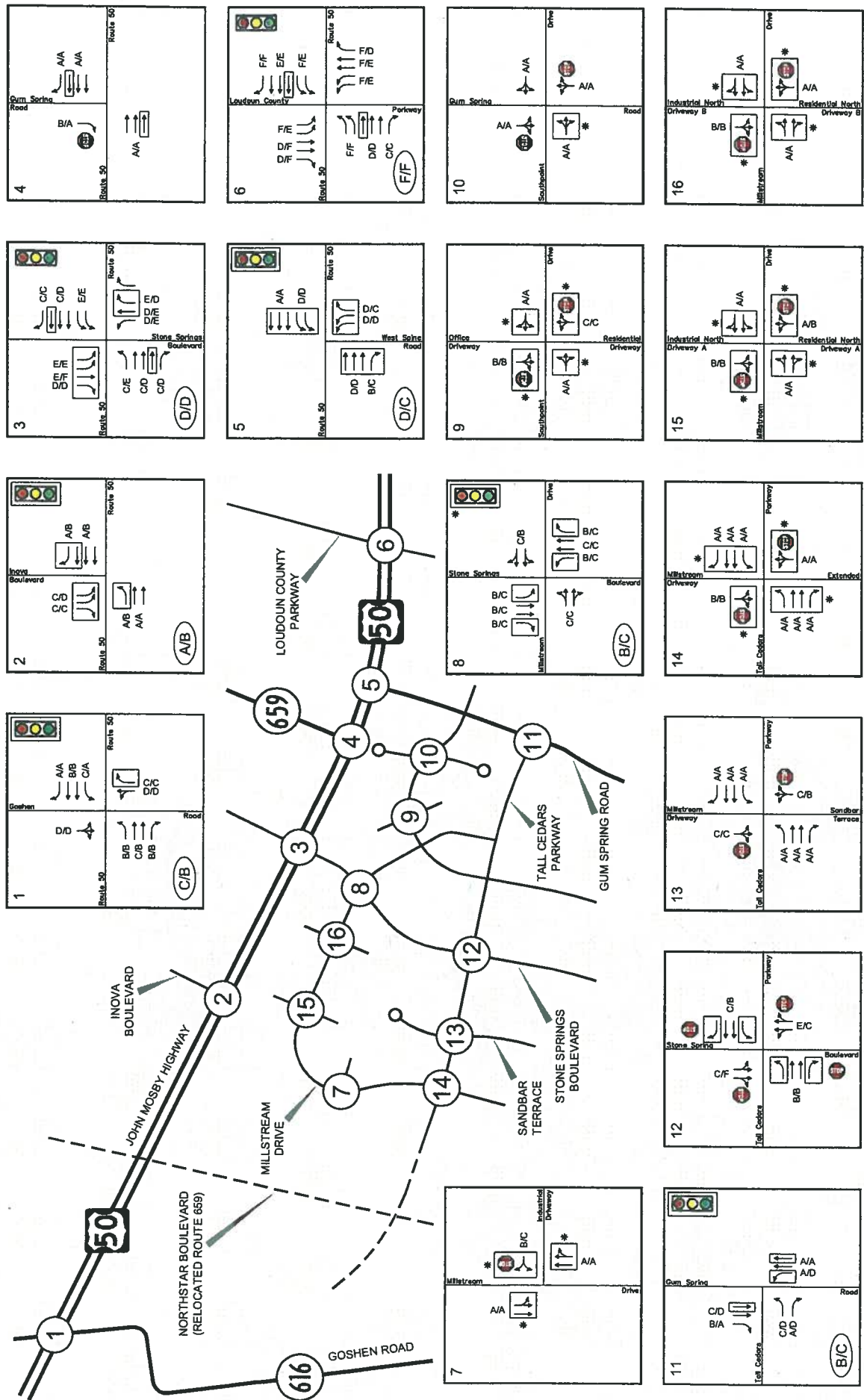




Figure 7
Future Proposed Lane Use and Traffic Control and
Peak Hour Levels of Service

xx Levels of Service
 (xx) Overall Levels of
 □ Offered Improvement
 □* Site Improvement
 * - Location of Future

- Represents One Travel Lane
-  Signalized Intersection
-  Stop Sign

North

Proffer Comparison

As requested by OTS staff, a comparison of the existing and proposed transportation proffers is outlined below:

Approved Proffers (October 2005)	Proposed Proffers (June 2009)	Difference
<u>ROW Dedication and Construction</u> ROW and easements provided at the request of the County	ROW and easements provided at the request of the County	No Change
<u>Tall Cedars Parkway</u> Design and construct a four-lane divided roadway with turn lanes in two phases from west terminus to Route 659 Relocated within 120-foot ROW in three phases.	No changes proposed	No Change
<u>Route 50</u> Construct third eastbound lane from 500 feet east of the Route 50/existing 659 intersection to the West Spine Road intersection.	No changes proposed	No Change
Submit plans and profiles for the construction of the third eastbound lane, within the existing median, from the West Spine Road to Loudoun County Parkway prior to the first residential zoning permit for Land Bays 1,2,3,4 or 5.	No changes proposed- Plans and profiles have been submitted and are approved.	No Change
<u>Route 50 Intersections</u> Route 50/West Spine Road. Construct auxiliary turn lanes on all approaches.	No changes proposed	No Change
Route 50/Gum Spring Road.	Pending other road connections, the applicant shall not object to the removal of the existing traffic signal at Route 50/Gum Spring Road and closure of the median break and modification of the existing Gum Spring Road entrance on the south side of Route 50 to a right-in/right-out only entrance by VDOT or others.	New proffer.
<u>Millstream Drive Extended</u> Extend Millstream westward to Route 659 Relocated in two phases and provide four-lanes within a 90-foot ROW	Extend Millstream west and south to Tall Cedars Parkway with a ROW from 52' to 64'. The roadway will be constructed and open to traffic within 12 months if necessary for access to Public Use Site #3 if requested by the County.	Modified ROW and timing of construction.

Approved Proffers (October 2005)	Proposed Proffers (June 2009)	Difference
<u>Phasing Plan</u> No more than 300 residential zoning permits within combined Land Bays 1,2,3,4 and 5 may be issued within a two-year period following approval of this Application	Designation changed to reflect "Land Bay 5R"	No Change
<u>Western Bypass/Route 659 Relocated</u> <u>Western Transportation Corridor.</u> If requested, reserve ROW for Western Transportation Corridor associated with Land Bays 4, 5 and 7. <u>Route 659 Relocated.</u> Dedicate 120' ROW from Tall Cedars Parkway to the southern site boundary. Construct four-lane undivided section in lieu of Route 50 improvements. Provide 120' ROW from Tall Cedars Parkway to northern boundary with no obligation to construct.	Deleted <u>North Star Boulevard (Route 659 Relocated).</u> Dedicate 120' ROW from Tall Cedars Parkway to the southern site boundary. Construct the eastern two-lanes of North Star Boulevard between TCP and the southern boundary, prior to the issuance of the 301st residential zoning permit in Land Bays 1,2,3,4 or 5R.	Deleted proffer Modified for construction of two eastern lanes between TCP and southern boundary.
<u>Signalization</u> Provide new traffic signals at: (1) Route 50/Stone Springs Blvd, (2) Route 50/Existing 659, (3) Tall Cedars Parkway/Route 659, (4) West Spine Road/Greenstone Drive, (5) Future West Spine Road/Route 50. Bonds for these signals are required at the time of record plat. Also, provide signalized of on-site roads with studies required when submitting preliminary subdivision applications.	Submit a traffic signal warrant study for the Stone Springs Boulevard/Millstream Drive intersection during the site plan review process for Land Bay EE2A. If warranted, contribute \$250,000 to the County for the design, construction, and installation of the signal.	Modified for signal warrant study and contribution.
<u>Park and Ride Lot</u> Provide bus shelter at existing park and ride lot	Shelter exists.	No Change
Public Use Site #4	Provide 100 commuter parking spaces and convey them to the County upon request.	New Proffer
<u>Cash Contribution for Regional Roads</u> Contribute \$0.50 per gross square foot areas zoned for industrial (PD-IP), office (PD-OP), and retail commercial (PD-CC(SC)).	No changes proposed	No Change
<u>Goshen Road</u> Dedicate frontage on Goshen Road, if required. No vehicular access allowed with no obligation to construct improvements.	No changes proposed	No Change
<u>Cash Contribution for Capital Facilities</u> Contribute \$37,660 per SF DU, \$22,291 per SFA, and \$12,611 per MF unit	No changes proposed	No Change

County of Loudoun
Office of Transportation Services

MEMORANDUM



DATE: April 17, 2009

TO: Stephen Gardner, Project Manager
Department of Planning

FROM: Lou Mosurak, AICP, Senior Transportation Planner *LM*

SUBJECT: ZMAP 2006-0011, ZCPA 2006-0003—Stone Ridge Commercial
Second Referral

Background

This referral reviews the revised rezoning (ZMAP) and concept plan amendment (ZCPA) applications for portions of the approved Stone Ridge development. The referral also updates the status of the transportation issues identified in the first OTS referral on the initial applications (dated October 10, 2006).

The subject ZMAP application proposes to rezone approximately 50 acres from the PD-H4, R-24, and PD-IP zoning districts to the PD-H4, R-16, PD-OP, and CLI zoning districts; these changes would result in a net increase of approximately 2,424 sq ft of non-residential (office) uses within Stone Ridge. A summary of these proposed land use changes is provided as *Attachment 1*. Additional residential uses are no longer proposed. With respect to the road network, the subject ZCPA application proposes to realign segments of South Point Drive (formerly Canary Grass Drive) to connect with Gum Spring Road (Existing Route 659), creating a continuous connection for local traffic between Millstream Drive and the West Spine Road without the need to access U.S. Route 50. Additionally, Millstream Drive (west of Stone Springs Boulevard) is proposed to be realigned to serve Landbay 7, connecting to Tall Cedars Parkway west of the proposed residential areas and will eliminate the need for a major floodplain crossing. A vicinity map and reduced version of the concept development plan are provided as *Attachment 2*. Access to the site is largely via the existing Stone Ridge internal road network. It is noted that Landbay 9, located north of the South Fork of Broad Run, would be accessed via U.S. Route 50 opposite a new at grade intersection approved with the INOVA Dulles South Hospital Campus in February 2008.

This referral is based on review of materials received from the Department of Planning on February 12, 2009, including (1) a letter from the Applicant dated January 27, 2009 responding to first referral comments; (2) a revised statement of justification prepared by the Applicant dated January 27, 2009; (3) a draft proffer statement, dated January 27, 2009; (4) a traffic impact study update prepared by Wells & Associates, LLC, dated January 26, 2009; and (5) a rezoning plan set (including a concept development plan (CDP)) prepared by Urban, Ltd., dated April 7, 2006 and revised through January 27, 2009. OTS staff also

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reviewed (6) the proffers and letter of clarification, dated October 5, 2005 and November 30, 2005, respectively, for the most-recently approved Stone Ridge rezoning application (ZMAP 2002-0013).

Existing, Planned and Programmed Transportation Facilities

Per the 2001 Revised General Plan, the portion of the subject property located east of future Route 659 Relocated is located within the Suburban Policy Area (Dulles Community), while the portion of the site to the west of future Route 659 Relocated is located in the Transition Policy Area.

Major transportation facilities serving or planned to serve the site and surrounding area are described below. References to the 2001 Revised Countywide Transportation Plan (2001 Revised CTP) are taken from CTP Appendix 1 (Design Guidelines for Major Roadways).

John Mosby Highway (U.S. Route 50) (from approximately 1 ¼ miles west of this site to Loudoun County Parkway) is currently a four-lane median divided minor arterial with controlled access. The 2001 Revised CTP designates the ultimate condition of this segment of Route 50 (east of Route 659 Relocated) as a six-lane divided (R6M) limited access principal arterial. Grade-separated interchanges are planned at Route 659 Relocated (west of this site) and at the West Spine Road and Loudoun County Parkway (both east of this site). All at-grade access is ultimately planned to be terminated. At the present time, a third eastbound lane, constructed by Stone Ridge, is in place from the South Fork of Broad Run east to just prior to the Gum Spring Road intersection; per previous proffered commitments (ZMAP 2002-0013), Stone Ridge is obligated to continue construction of the third Route 50 eastbound lane east to Loudoun County Parkway. Various other rezoning applications approved in 2006 and 2007 (i.e., Dulles Landing, Arcola Center, Glascock Field) have proffered to construct improvements that would ultimately result in a continuous third Route 50 westbound lane between Loudoun County Parkway and Stone Springs Boulevard. INOVA Hospital, as part of its 2008 special exception approval, is obligated to construct a third Route 50 westbound lane across its frontage (west of the South Fork of Broad Run), as well as to construct a full median crossover at its Route 50 entrance (INOVA Boulevard) with signalization when warranted.

Tall Cedars Parkway is the Route 50 South Collector Road. It is classified as a major collector by the 2001 Revised CTP and is currently constructed to its interim four-lane divided (U4M) condition within Stone Ridge, from Gum Spring Road (Existing Route 659) west to the new Arcola Elementary School. East of future Route 659 Relocated, Tall Cedars Parkway is ultimately planned to be widened to a six-lane divided (U6M) section and continue east through South Riding (incorporating existing segments of the roadway) and connecting with Route 50 at a grade-separated interchange in the vicinity of Willard Road.

Stone Springs Boulevard is a four-lane divided (U4M) local road which functions as the main north-south road through Stone Ridge. Signalization is in place at the Route 50 intersection. As part of the Glascock Field rezoning application approved in 2007, Stone Springs Boulevard will be extended north of Route 50 and tie into existing Gum Spring Road in the vicinity of Dulles South Parkway (the Route 50 North Collector Road). Modifications to

the traffic signal and turn lanes at the Route 50/Stone Springs Boulevard intersection were proffered as part of the approved Glascock Field application. It is noted that at such time as Route 50 becomes limited access with interchanges in operation at Route 659 Relocated (Northstar Boulevard) and the West Spine Road, all other at-grade access, including Stone Springs Boulevard, is planned to be terminated.

Gum Spring Road (Existing Route 659) is currently a two-lane undivided (R2) roadway. Ultimately, the **2001 Revised CTP** envisions the segment of Gum Spring Road between Tall Cedars Parkway and the Route 50 North Collector Road (south of Arcola) to be closed once alternate road connections are in place (e.g., the West Spine Road to the east and Stone Springs Boulevard Extended to the west). As part of the 2007 approval of the Glascock Field rezoning application, the segment of Gum Spring Road north of Route 50 will be realigned to form a T-intersection with Stone Springs Boulevard Extended.

West Spine Road (also referred to as **Route 606 Extended**) is a planned new roadway corridor which will run between the existing Route 606 corridor (at the future intersection with Loudoun County Parkway) south to Route 50 (at a point approximately 1,000 feet east of the existing Route 50/Gum Spring Road intersection), and continuing south to join the present alignment of Gum Spring Road at Tall Cedars Parkway. South of this point, the West Spine Road will follow the alignment of Gum Spring Road south to Braddock Road and Prince William County. The **2001 Revised CTP** calls for the West Spine Road to ultimately be a six-lane divided (U6M) major collector from existing Route 606 south to Braddock Road, though interim construction as a four-lane divided (U4M) facility will likely be in place for some time. A grade-separated interchange is planned at Route 50. At present, no construction of the West Spine Road has commenced north of Route 50. South of Route 50, a half-section (two lanes) of the West Spine Road have been constructed, but are not yet open to traffic. Construction of the remaining two lanes between Route 50 and Tall Cedars Parkway has been committed to by private sector proffer, though all necessary right-of-way has not been acquired. Between Tall Cedars Parkway and Braddock Road, Existing Route 659/West Spine Road is currently being expanded under a private sector proffer to a four-lane divided (U4M) facility.

Millstream Drive is a four-lane undivided (U4) local road within Stone Ridge, located north of Tall Cedars Parkway and south of Route 50. It currently forms a partial loop, intersecting with Tall Cedars Parkway both east and west of Stone Springs Boulevard. The subject applications propose to realign the western segment of existing Millstream Drive, resulting in the roadway intersecting Tall Cedars Parkway further to the west (west of the power lines). An unbuilt segment of Millstream Drive (proffered as part of a previous Stone Ridge rezoning (ZMAP 2002-0013) approved in 2005) that would have extended the roadway west to Route 659 Relocated is proposed to be eliminated, avoiding the need for a major floodplain crossing of the South Fork of the Broad Run.

South Point Drive is an existing two-lane (U2) local road which provides access to the Gum Spring Village Center development on the east side of Gum Spring Road; South Point Drive is proposed to be extended further to the east (to the future West Spine Road) by the pending West Spine Plaza application (SPEX 2007-0029). The subject Stone Ridge applications propose to extend South Point Drive west of Gum Spring Road and connect with Millstream

Drive, creating a road connection that would provide local access between Stone Ridge, Gum Spring Village Center, and West Spine Plaza without reliance on Route 50.

Route 659 Relocated (also referred to as **Northstar Boulevard**) is a planned new roadway corridor that would run from Existing Route 659 (Belmont Ridge Road) in the Brambleton development south to Route 50, continuing south to connect with the future Route 234 Bypass in Prince William County. The **2001 Revised CTP** calls for Route 659 Relocated to ultimately be a six-lane divided (U6M) minor arterial with controlled access. A grade-separated interchange is planned at Route 50. The most recent previous Stone Ridge application (ZMAP 2002-0013) provided an on-site right-of-way reservation for the reserved ultimate condition of this future roadway, and the current application is proposing to construct a two-lane section of the road from Tall Cedars Parkway to the southern Stone Ridge property line.

Dulles South Park & Ride Lot is a 250-space commuter parking lot located within the Stone Ridge Village Center shopping center, along the north side of Millstream Drive. Loudoun County Transit operates weekday peak hour commuter bus service from this lot to the Dulles North Transit Center, Rosslyn, the Pentagon and numerous points in downtown Washington, DC. This lot, which opened in 2006, was proffered by Stone Ridge as part of a previous rezoning (ZMAP 1994-0017) approved in 1995.

Review of Applicant's Revised Traffic Study

The Applicant's traffic study update (dated January 26, 2009) reflects the overall development program proposed with these applications, including the net increase of 2,424 sq ft of office uses within Stone Ridge. The study assumes site buildout in a single phase by 2015 and includes updated (2008) traffic counts at eight (8) existing intersections. Relevant portions of the revised traffic study are summarized below.

Road Network Analyzed by Revised Study

The Applicant's traffic study update analyzed current and future traffic conditions, focusing on eight (8) existing intersections and adjacent roadway segments in and around Stone Ridge. Future road segments and intersections are shown as dashed lines on the graphic. Existing lane use and traffic control is illustrated on *Attachment 3*.

Existing Traffic Volumes and Intersection Levels of Service (LOS)

Attachment 4 illustrates existing daily and peak hour traffic volumes in the vicinity of the subject site. AM and PM peak hour traffic counts were taken at eight (8) intersections in the study area in 2008. Daily traffic volumes (VPD) shown on *Attachment 4* were estimated based on the assumption that PM peak hour traffic volumes represent 10% of daily traffic volumes.

Attachment 5 (Column 1) summarizes existing intersection LOS in the vicinity of the site. Under existing signalized control, both the Route 50/Stone Springs Boulevard intersection (Intersection 3) and the Route 50/Route 659 intersection (Intersection 4) operate at an overall unacceptable LOS in the AM peak hour, though certain individual movements at each

intersection operate at unacceptable LOS in the PM peak hour. The Route 50/Loudoun County Parkway intersection (Intersection 6) operates at overall unacceptable LOS conditions in both the AM and PM peak hours with existing signalization.

Background Traffic Assumptions

The traffic study update includes background traffic from a total of 19 pending and/or approved developments in the surrounding area. The study assumes a 2% annual growth rate, which was applied to all turning movements for forecast year (2015) conditions. The study states that this rate was determined based on recent conversations with VDOT; OTS staff notes that the same growth rate was used in the December 2008 traffic study for the adjacent West Spine Plaza application (SPEX 2007-0029).

Trip Generation from Proposed Development

The proposed applications would result in approximately 331 additional weekday average daily trips (a 1% increase) beyond those generated by the currently approved Stone Ridge development program. This figure includes 71 additional AM peak hour trips (3% increase) and 38 additional PM peak hour trips (1% increase). These figures are illustrated on the trip generation comparison included as *Attachment 6*, and reflect adjustments in standard trip generation rates for (1) internal capture; (2) transportation demand management (TDM) measures, and (3) pass-by trips for approved retail uses, all based on previous Stone Ridge traffic studies and approvals. The traffic study notes that “the proposed development program would have less impact on the peak hour, peak direction trips since the largest shift in development density is proposed to be to employment uses” (part of Conclusion #3, Page 29). This is evidenced by the figures in *Attachment 6*, which show that a majority of the increased peak hour trips would flow into Stone Ridge in the AM peak and leave Stone Ridge in the PM peak.

Forecasted (2015) Traffic Volumes, Levels of Service (LOS), and Recommended Mitigation Measures

Attachments 7 & 8 illustrate the 2015 total future traffic volumes (i.e., background traffic plus site-generated traffic) for both the approved and proposed Stone Ridge development programs, respectively. Year 2015 total future peak hour intersection LOS for all 16 intersections in the study area is illustrated on *Attachment 5 (Columns 2 & 3)* for both the approved and proposed development programs, respectively. The total future lane use and traffic control necessary to achieve the peak hour LOS categories identified in *Attachments 7 & 8* are depicted in *Attachments 9 & 10*; lane configuration changes proposed by the subject applications are noted by asterisks.

Significant changes to the regional road network assumed by 2015 include (1) the completion of the West Spine Road between Tall Cedars Parkway and Route 50 (the West Spine Road will replace Gum Spring Road as the through traffic connection south of Route 50); (2) the completion of Stone Springs Boulevard extended north of Route 50; and (3) the conversion Gum Spring Road north of Route 50 to a right-in, right-out only configuration. These configurations are depicted on *Attachment 10*.

In 2015, under both the approved and proposed development programs, the updated traffic study indicates that several movements would operate at failing LOS in both the AM and PM peak hours at the Route 50/Stone Springs Boulevard intersection (Intersection 3) and at the the Route 50/West Spine Road intersection (Intersection 5) (both intersections would be signalized). The signalized Route 50/Loudoun County Parkway intersection (Intersection 6) would continue to operate at overall failing LOS in both the AM and PM peak hours. The on-site intersections of Stone Springs Boulevard/Millstream Drive (Intersection 8) and Stone Springs Boulevard/Tall Cedars Parkway (Intersection 12) would experience significant side street delays (LOS F) as a result of removing stop sign controls currently in place on the through street at each intersection.

The study concludes that the proposed development program would result in similar conditions to those that would be realized under the approved development program, while providing a move favorable local connection between Stone Ridge and the West Spine Road via Southpoint Drive, which would not require access to Route 50.

Status of Transportation Issues/Comments

Staff comments from the first OTS referral (October 10, 2006), as well as the Applicant's responses (quoted directly from the January 27, 2009 Applicant response letter) and issue status, are provided below.

1. Initial Staff Comment (1st Referral, October 10, 2006): The application proposes to realign existing Gum Spring Road to create a T-intersection with a local road (Canary Grass Drive) approximately 300 feet south of the existing Gum Spring Road/Route 50 intersection, and proposes to remove the existing traffic signal and median crossover at the intersection of existing Gum Spring Road and Route 50, creating a right-in, right-out scenario to/from eastbound Route 50. This proposed right-in, right-out configuration is not acceptable as it is inconsistent with the adopted Revised Countywide Transportation Plan (Revised CTP), which calls for the ultimate condition of this segment of Route 50 to be limited access with grade separated interchanges at various locations, including the West Spine Road (approximately 1,000 feet to the east of the proposed right-in, right-out movement). The proposed right-in, right-out movement is not only inconsistent with the limited access policy but would also result in weave/merge conflicts with the future Route 50/West Spine Road interchange. A more acceptable configuration would be to extend Canary Grass Drive to tie into the east-west road (Southpoint Boulevard) approved as part of the adjacent Gum Spring Village Center development, with future access to the West Spine Road south of Route 50. The Applicant should coordinate this connection with Gum Spring Village Center.

Applicant's Response (January 27, 2009): The application provides for the extension of former Canary Grass Drive (now South Point Drive) in the Gum Spring Village Center project. This street configuration is consistent with the eventual closure of the existing Route 659 and Route 50 intersection and median crossover.

Issue Status: OTS appreciates the revised road layout to connect Southpoint Drive from its existing terminus west to Millstream Drive. This connection will

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provide beneficial local access between Stone Ridge and the future West Spine Road without the need to access Route 50.

OTS notes that the Route 50/Existing Route 659 (Gum Spring Road) intersection will ultimately be closed, and north-south through traffic will utilize the future West Spine Road. The decision regarding the timing of modifications or closure to the Route 50/Gum Spring Road intersection rests with VDOT as part of a larger operational review/analysis of the road network; the timing and extent of any modifications to this intersection and the Applicant's role/responsibility for any such modifications should be discussed with VDOT. Additionally, it is not clear if Gum Spring Road between Route 50 and Tall Cedars Parkway needs to be retained at all once the West Spine Road is constructed should all adjacent parcels have alternate access in place; further discussion with VDOT and other adjacent property owners is necessary.

2. Initial Staff Comment (1st Referral, October 10, 2006): Issues with right-of-way acquisition and construction of the proposed West Spine Road between Tall Cedars Parkway and Route 50 add additional complications and uncertainty to the interim and ultimate roadway configuration in this area. Although construction plans for a two-lane (northbound) section of the West Spine Road between Tall Cedars Parkway and Route 50 were approved by the County in 2002 (CPAP 2001-0184), no construction has commenced to date. No plans are currently on file for the remaining two (southbound) lanes of the West Spine Road between Route 50 and Tall Cedars Parkway. (Construction plans (CPAP-2002-0189) were approved by the County in 2004 for a four-lane section of Gum Spring Road from Tall Cedars Parkway south to Braddock Road, but no construction has commenced to date). It has been anticipated that existing Gum Spring Road and the West Spine Road would operate as a one-way pair of roads until all four lanes of the West Spine Road are completed between Tall Cedars and Route 50, but such a configuration has not been approved by VDOT. All approved construction plans show cul-de-sacs at both ends of the segment of existing Gum Spring Road between Tall Cedars Parkway and Route 50 (as envisioned by the currently-approved Stone Ridge development program and the approved Gum Spring Village Center special exception (SPEX 2003-0033, approved in 2004). Based on the anticipated cul-de-sacs at each end of this segment of Gum Spring Road, Gum Spring Village Center (as required by its SPEX condition of approval) has prepared and submitted to the County a traffic signal warrant study for its Southpoint Boulevard entrance onto Gum Spring Road, approximately 600 feet south of Route 50. The study finds that a traffic signal is not warranted at the proposed intersection. Given the situation with the West Spine Road and the likelihood that existing Gum Spring Road will remain open in its current condition for the foreseeable future, OTS strongly disagrees with this conclusion. Additional discussion and coordination on this matter and the overall status of the West Spine Road are necessary.

Applicant's Response (January 27, 2009): We look forward to a meeting with OTS to discuss these matters.

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Issue Status: As stated above, OTS appreciates the revised road layout to connect Southpoint Drive from its existing terminus at Gum Spring Road (Intersection 10) west to Millstream Drive. The timing of this connection is not specified in the subject application materials. Should this connection be made prior to the closure of Gum Spring Road south of Route 50, additional turn lanes and signalization would likely be necessary. Subsequent to the resolution of the larger road network issues identified in Comment #1 above, discussion on the timing of the Southpoint Drive connection is needed. OTS staff is available to meet with VDOT and the Applicant to discuss the timing of this connection and its relationship to the larger road network in the area.

3. Initial Staff Comment (1st Referral, October 10, 2006): While the Applicant's traffic study indicates that the existing Gum Spring Road/Route 50 signalized intersection operates at LOS E during the AM peak hour, other traffic studies recently submitted to the County (e.g., Arcola Center) indicate that the intersection operates at LOS F during both the AM and PM peak hours. An explanation/clarification of this discrepancy needs to be provided.

Applicant's Response (January 27, 2009): An updated traffic study is included with this submission.

Issue Status: OTS appreciates the Applicant's traffic study update and has no further comments on this issue. Issue resolved.

4. Initial Staff Comment (1st Referral, October 10, 2006): Proffered improvements to Route 50 committed to as part of the previous Stone Ridge rezoning (ZMAP 2002-0013) should also be included with this proposal as "up front" improvements as the current application is also part of Stone Ridge and would add trips to the Route 50 corridor. These proffers include "up front" construction of the third eastbound lane of Route 50, roughly from Stone Ridge to Loudoun County Parkway (as described in ZMAP 2002-0013, Proffer II.B.3., November 30, 2005 Letter of Clarification), and improvements to the West Spine Road/Route 50 intersection (as described in ZMAP 2002-0013, Proffer II.B.4.(c), October 5, 2005 Proffer Statement).

Applicant's Response (January 27, 2009): The Route 50 improvements proffered with ZMAP 2002-0013 remain in effect and will not be changed by this Application.

Issue Status: The Applicant is requested to confirm the approval status of the third Route 50 eastbound lane between the current terminus of the eastbound three-lane section (just west of Gum Spring Road) and the West Spine Road. See also Comment #9 below.

5. Initial Staff Comment (1st Referral, October 10, 2006): Given existing and forecasted traffic volumes, grade-separated interchanges are an integral part to long-term transportation solutions in the Route 50 Corridor. Currently, a diamond interchange is

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envisioned at intersection of the West Spine Road and Route 50. The Applicant should provide a fair-share contribution towards this future improvement.

Applicant's Response (January 27, 2009): *The existing Stone Ridge proffers, Proffer II.I., include a cash contribution commitment for regional transportation improvements. This Application does not change the existing commitment.*

Issue Status: See Comment #9 below.

6. Initial Staff Comment (1st Referral, October 10, 2006): Staff has no issues with proposed re-alignment of Millstream Drive, provided that the future east-west segment intersects with Route 659 Relocated at a point sufficiently south of the planned interchange of Route 659 Relocated and Route 50.

Applicant's Response (January 27, 2009): *Comment acknowledged.*

Issue Status: The revised applications no longer propose this roadway alignment, and therefore this comment is no longer applicable. Issue resolved.

7. Initial Staff Comment (1st Referral, October 10, 2006): The inclusion of 307 additional residential units as part of this application appears to be a reversal of Board action taken with the previous Stone Ridge rezoning (ZMAP 2002-0013), in which 216 residential units were eliminated and approximately 200,000 sq ft of non-residential uses were instead retained.

Applicant's Response (January 27, 2009): *The Application has been revised to relocate previously approved residential units within the Property, but does not request an increase in the number of approved residential units. A modest increase in the amount of non-residential floor area is requested.*

Issue Status: The revised applications no longer propose additional residential units beyond previous approvals, and therefore this comment is no longer applicable. Issue resolved.

8. Initial Staff Comment (1st Referral, October 10, 2006): An appropriate transit contribution should be provided for the 307 residential units proposed on site.

Applicant's Response (January 27, 2009): *As noted above, the revised Application proposes no increase in the number of previously approved residential units.*

Issue Status: The revised applications no longer propose additional residential units beyond previous approvals, and therefore this comment is no longer applicable. Issue resolved.

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New Issues

After review of the revised application, OTS staff has identified the following additional issues/comments:

9. The Applicant is requested to provide a comparison of the transportation improvements proposed with the subject applications with those improvements proffered as part of previous Stone Ridge approvals.
10. The Applicant should commit to implement/construct the on-site “proffered” and “site” improvements identified in the updated traffic study for the proposed development program (see *Attachment 10*). The study indicates that these improvements are necessary to realize the forecasted peak hour intersection LOS conditions presented.
11. Future traffic control at the intersections of Stone Springs Boulevard and Millstream Drive (Intersection 8) and Stone Springs Boulevard and Tall Cedars Parkway (Intersection 12) requires further clarification and discussion. Both of these intersections currently operate at acceptable LOS during both the AM and PM peak hours under four-way stop control. The Applicant’s updated traffic study indicates that stops signs are proposed to be removed from the side streets at both intersections, resulting in two-way stop control with AM and PM peak hour LOS F conditions on the side streets. The Applicant should provide traffic signal warrant studies for each of these intersections, and agree to install the signals if and when warranted. It is unclear from the draft proffers whether the existing on-site signalization proffer (Proffer II.F.) is proposed to be retained with the subject applications. It is noted that VDOT requested traffic signal warrant studies at both of these intersections during its recent review of the now-approved Healthsouth Rehabilitation Hospital (SPEX 2008-0018) on Millstream Drive, and that the Healthsouth application includes conditions of approval requiring the addition of an eastbound left turn lane on Millstream Drive at Stone Springs Boulevard, as well as a fair-share contribution to a future traffic signal at that location.
12. The Applicant intends to access Landbay 9 via Route 50 at the proposed INOVA Boulevard intersection/median crossover (Intersection 2) to be constructed and signalized as part of the approved INOVA Dulles South Hospital Campus (SPEX 2006-0012). Ultimately, this segment of Route 50 (east of future Route 659 Relocated (Northstar Boulevard)) is planned to be converted to a limited access facility. To this end, the INOVA Hospital SPEX includes a condition of approval requiring that INOVA’s direct access to Route 50 be terminated at such time the Route 50 North Collector Road and Route 659 Relocated (Northstar Boulevard) are constructed and open for public use and provide access to Route 50. As part of this application, OTS recommends a similar commitment from Stone Ridge to terminate direct Route 50 access to Landbay 9 at such time as Route 659 Relocated (Northstar Boulevard) is in place and provides access to Route 50. The Applicant should indicate an alternate means of access to Landbay 9.
13. The Applicant is requested to clarify the intent/status of the text on the plan set indicating “Alternate Private Access Road” from Landbay 9 north to Route 50.

14. OTS appreciates the Applicant's proposed commitment to construct/bond for construction the eastern two lanes of Route 659 Relocated (Northstar Boulevard) between Tall Cedars Parkway and the southern Stone Ridge property line. This is a new commitment beyond the proffers approved with ZMAP 2002-0013. However, given that VDOT will not accept a half section of roadway without a guarantee from the County that the remaining half section will be constructed, OTS requests that the Applicant commit to construct a four-lane divided roadway in a configuration that will accommodate future expansion to a six-lane divided section (as called for in the 2001 Revised CTP).
15. OTS has no objection to the realignment of Millstream Drive as proposed with these applications.

Conclusion

Subject to resolution of the issues identified above, OTS would not object to the approval of these applications. OTS staff is available to meet with the Applicant and VDOT for further discussion.

ATTACHMENTS

1. Stone Ridge Land Use Summary (Existing and Proposed Totals) (Traffic Study Table 1)
2. Vicinity Map (Traffic Study Figure 1) and Concept Development Plan
3. Existing (2008) Lane Use and Traffic Control and Peak Hour LOS (Traffic Study Figure 4)
4. Existing (2008) Traffic Volumes (Traffic Study Figure 3)
5. Intersection LOS Summary (Existing, Currently-Approved Program, and Proposed Program Scenarios) (Traffic Study Table 2)
6. Trip Generation Comparison Table (Traffic Study Table 5) and Chart
7. Future (2015) Approved Program Traffic Forecasts (Traffic Study Figure 8)
8. Future (2015) Proposed Program Traffic Forecasts (Traffic Study Figure 9)
9. Future (2015) Approved Program Lane Use and Traffic Control and Peak Hour LOS (Traffic Study Figure 6)
10. Future (2015) Proposed Program Lane Use and Traffic Control and Peak Hour LOS (Traffic Study Figure 7)

cc: Andrew Beacher, Assistant Director, OTS
John Bassett, Transportation Engineer, VDOT
Tom Walker, Senior Transportation Engineer, VDOT

Table 1
Stone Ridge Commercial
Land Use Summary (1)(2)(3)

Land Use	Existing		Proposed		Total	
	Totals	Units	Totals	Units	Change	Units
Single-Family Detached	853	D.U.	853	D.U.	-	D.U.
Townhouse/Condominium	1,741	D.U.	1,741	D.U.	-	D.U.
Multi-Family	671	D.U.	671	D.U.	-	D.U.
Total Residential	3,265	D.U.	3,265	D.U.	-	D.U.
Retail	316,378	S.F.	316,378	S.F.	-	S.F.
Office (PD-OP/CLI)	282,557	S.F.	398,065	S.F.	115,508	S.F.
Light Industrial (PD-IP)	570,250	S.F.	457,166	S.F.	(113,084)	S.F.
Total Commercial/Employment	1,169,185	S.F.	1,171,609	S.F.	2,424	S.F.

Notes: (1) Total Change based on Concept Development Plan prepared by Urban Engineering, dated December 8, 2008.

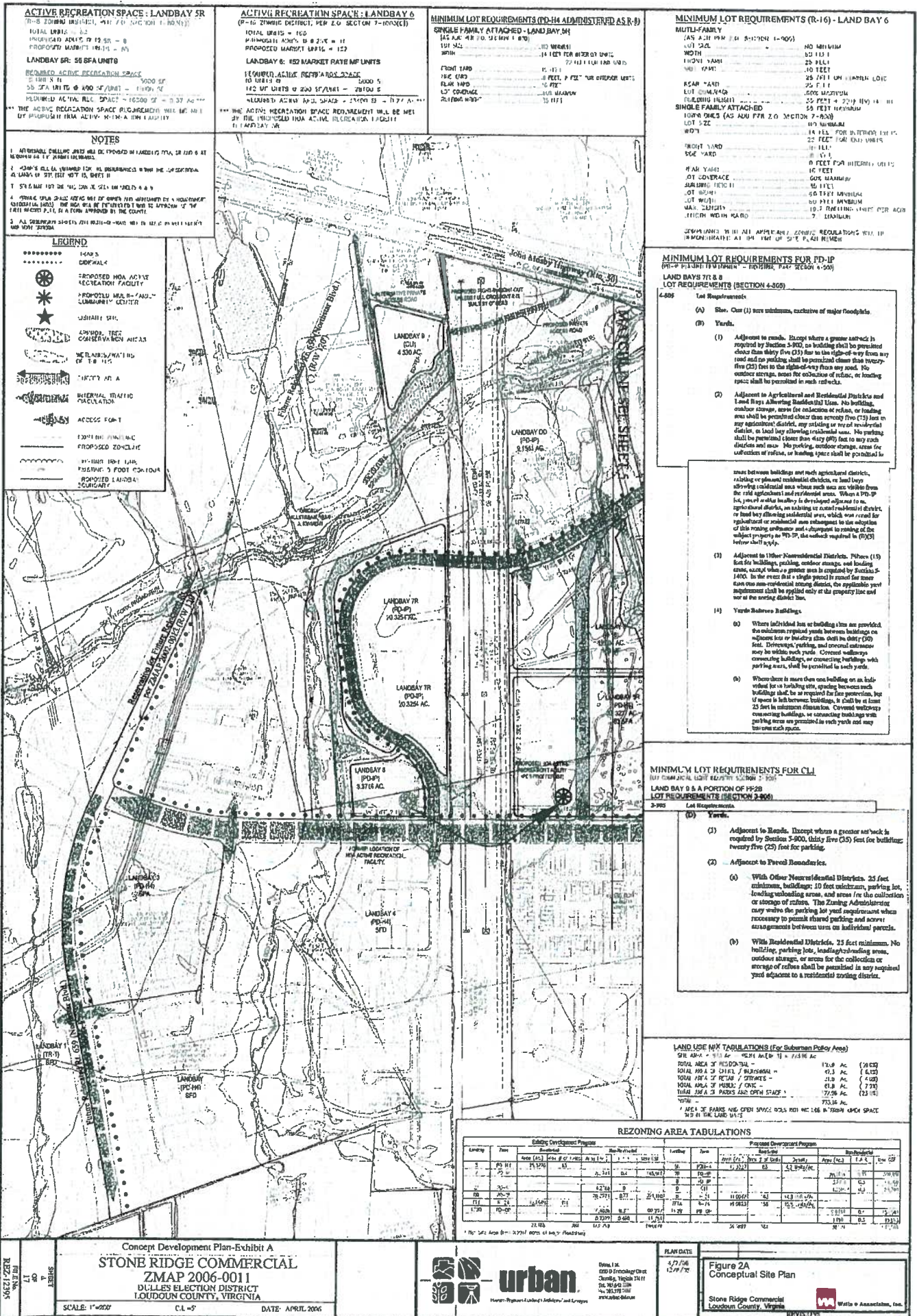
(2) Proposed and Existing Totals based on the overall Approved Stone Ridge Development

(3) CLI was assumed as office for purpose of comparison and trip generation analysis.



Figure 1
Site Location





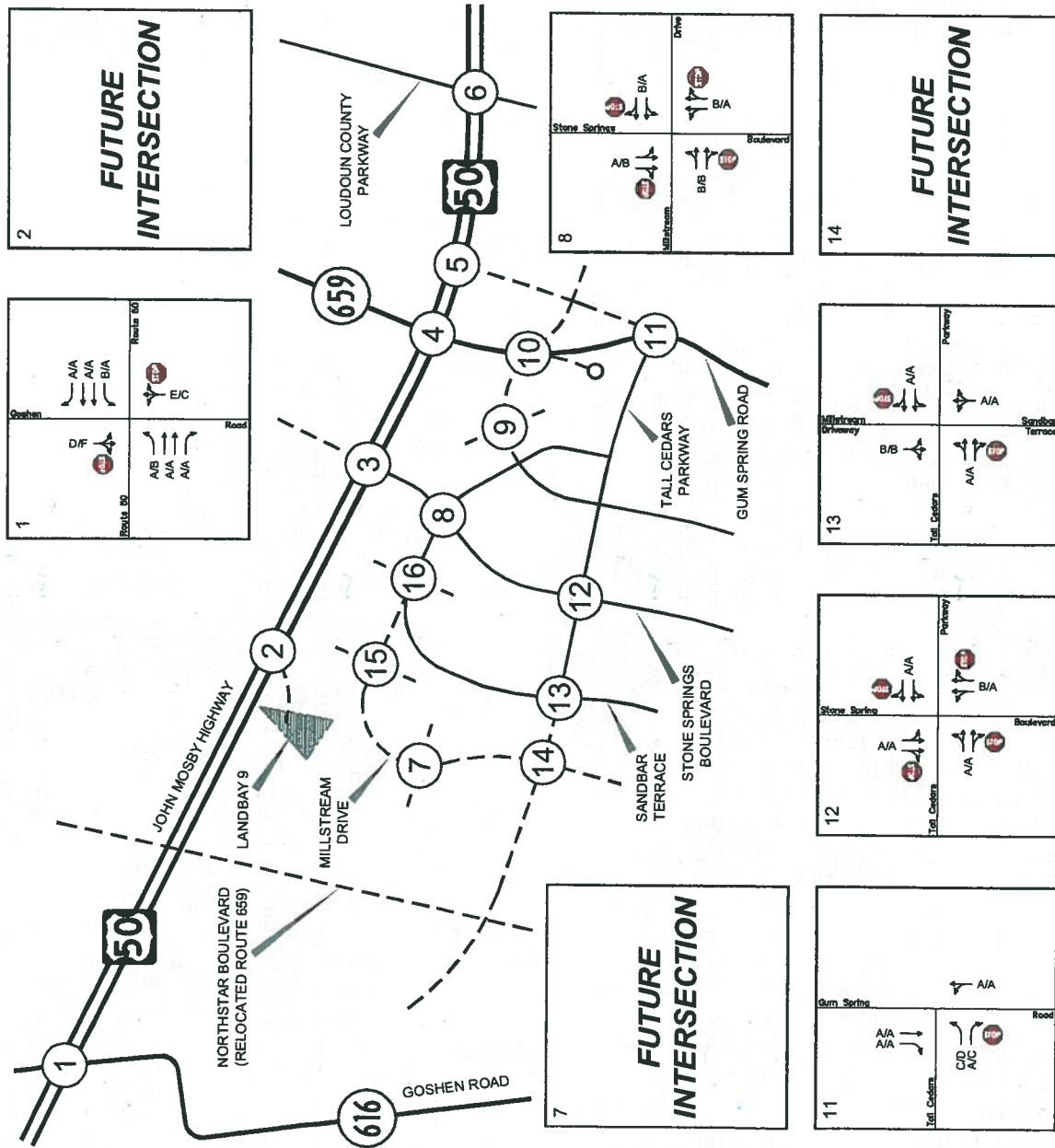


Figure 4
Existing Lane Use and Traffic Control and
Peak Hour Levels of Service

xx Levels of Service
xx Overall Levels of Service
← Represents One Travel Lane
Signalized Intersection
Stop Sign



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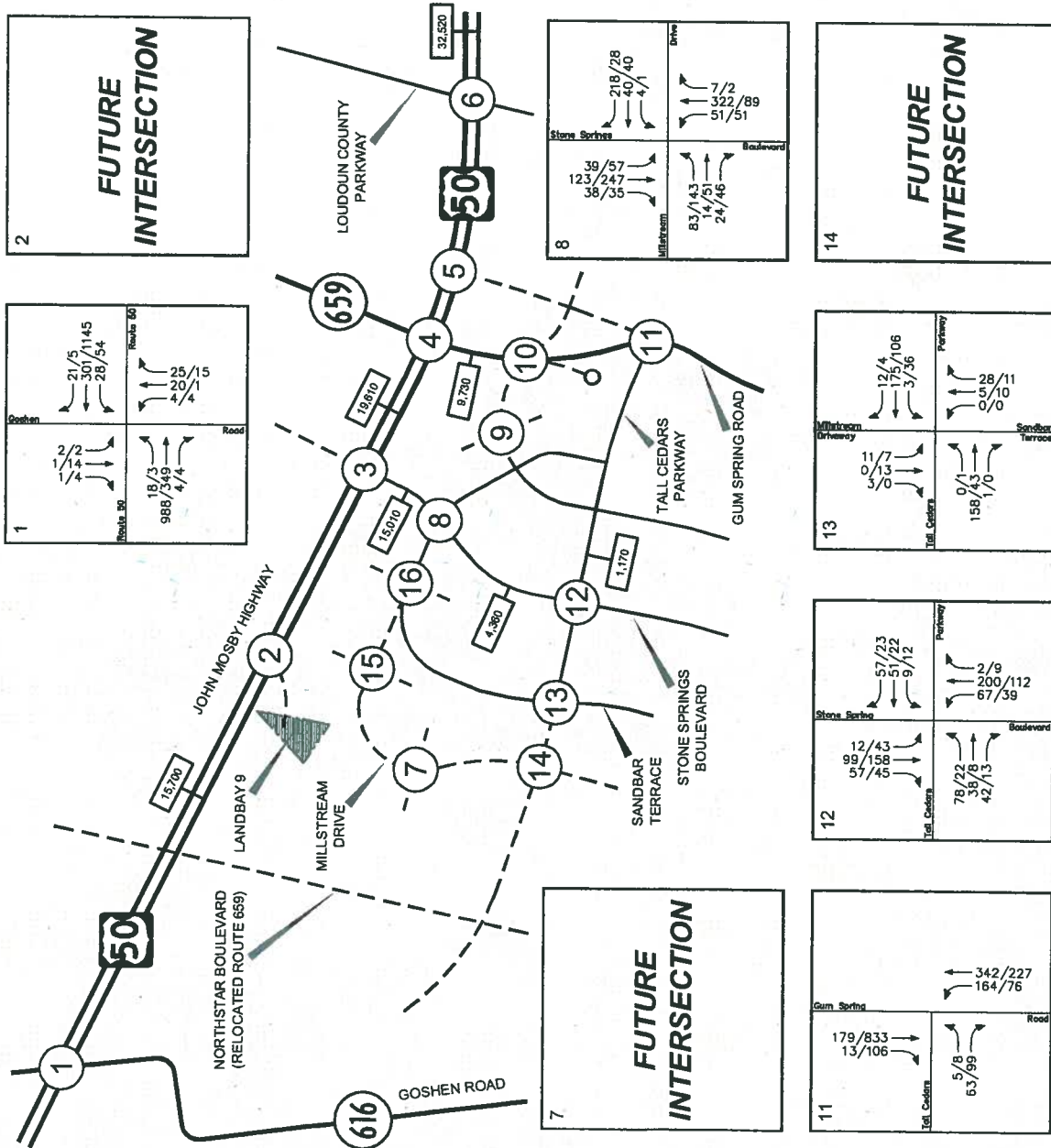


Figure 3
Existing Peak Hour Traffic Volumes

ADT Average Daily Trips

AM PEAK HOUR
PM PEAK HOUR
000/000



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Table 2-1
Stone Ridge Commercial
Intersection Level of Service Summary (1) (2) (3)

Intersection	Intersection Control	Critical Movement	2008		Currently Approved Program		2015	
			Existing		Program		Proposed Program	
			AM	PM	AM	PM	AM	PM
(1) U.S. Route 50/ Goshen Road	Stop Sign	EBL WBL NBLTR SBLTR	A (8.1) B (11.0) E (35.2) D (27.8)	B (11.7) A (8.3) C (17.6) F (58.9)	N/A		N/A	
Background Improvement: Install Signal, Add NBR, Optimize Timings (by others)	Signal	EBL EBT EBR WBL WBT WBR NBLT NBR SBLT SBR Overall	N/A		B (11.2) C (24.6) B (12.3) C (21.2) B (11.3) A (9.2) D (50.0) C (20.1) D (26.4) C (23.6)	B (16.7) B (14.3) B (11.1) A (7.9) B (19.2) A (6.9) D (42.9) C (27.3) D (29.3) B (19.0)	B (11.3) C (25.0) B (12.4) C (21.7) B (11.4) A (9.3) D (50.0) C (20.4) D (26.6) C (23.9)	B (16.8) B (14.2) B (11.0) A (7.9) B (19.2) A (6.8) D (43.0) C (27.4) D (29.4) B (19.0)
(2) U.S. Route 50/ Racefield Ln/ Land Bay 9/NOVA Driveway	Signal	EBL EBT EBR WBL WBT WBR NBLTR SBL SBLT SBR Overall	N/A		A (6.6) B (17.5) A (7.9) B (18.5) A (8.7) A (8.1) D (51.0) D (49.5) D (49.6) D (40.8) B (15.8)	B (18.9) B (15.1) B (10.9) B (12.2) C (23.4) B (12.9) D (47.8) D (50.3) D (50.5) D (46.6) C (24.3)	A (6.6) B (18.0) A (8.0) B (18.4) A (8.8) A (8.2) D (51.1) D (49.5) D (49.6) D (40.6) B (16.1)	C (22.2) B (17.8) B (12.8) B (14.3) C (28.1) B (15.0) D (45.6) D (53.4) D (53.4) D (38.8) C (27.9)
(3) U.S. Route 50/ Stone Springs Blvd	Signal	EBT EBR WBL WBT NBL NBR Overall	B (11.7) A (8.5) F (93.3) A (8.2) F (80.5) E (210.1) E (69.1)	B (10.1) A (9.4) F (92.7) A (0.5) E (64.7) D (42.1) C (27.0)	N/A		N/A	
Background Improvement: Add SB Leg, Optimize Timings, Add NB Lanes, Add Through Lanes On Rt. 50.	Signal	EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBR Overall	N/A		C (21.9) C (32.5) C (25.4) E (63.2) C (20.6) B (18.8) D (45.4) E (55.2) E (63.7) E (77.3) E (71.0) D (54.3) D (42.6)	E (74.5) D (46.5) D (39.2) E (59.4) D (48.6) C (26.7) E (62.7) E (56.4) D (47.3) E (70.1) E (79.1) D (51.3) D (53.6)	C (20.5) C (30.5) C (24.1) E (62.6) C (20.5) B (18.6) D (47.5) E (65.9) E (57.1) D (46.8) E (70.1) E (77.6) D (54.6) D (41.5)	E (75.4) D (45.7) D (38.6) E (59.2) D (48.6) C (28.7) E (65.9) E (57.1) D (46.8) E (70.1) E (79.8) D (51.3) D (53.7)
(4) U.S. Route 50/ Gum Spring Rd (VA 659)	Signal	EBL EBT EBR WBL WBT WBR NBLTR SBLTR Overall	B (12.0) C (29.8) B (13.3) E (57.0) C (22.6) C (20.8) F (247.4) E (78.2) E (58.7)	D (42.8) E (74.8) E (71.7) C (24.5) C (31.4) B (11.2) F (130.1) E (108.5) D (54.0)	N/A		N/A	
Background Improvement: Remove Signal, Remove NB Leg, R/O Only (by others)	Stop Sign	SBR	N/A		B (10.2)	A (9.8)	B (10.4)	A (9.7)
(5) U.S. Route 50/ West Spine Road	Signal	EBT EBR WBL WBT NBL NBR Overall	N/A		E (54.6) A (9.1) D (52.3) A (8.5) D (54.1) D (28.4) D (40.6)	E (72.0) C (22.8) D (52.3) A (9.6) E (64.9) C (20.9) D (37.1)	E (62.2) A (9.9) E (55.7) A (9.3) D (54.1) D (29.0) D (44.0)	E (59.8) C (22.9) E (57.3) A (9.4) E (64.9) C (26.9) D (35.7)
(6) U.S. Route 50/ Loudoun County Pkwy (Old Ox Road)	Signal	EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBR Overall	D (54.4) C (32.8) C (22.9) E (65.8) D (46.9) F (98.6) E (65.8) E (62.3) D (45.6) F (528.2) D (41.9) D (49.8) F (110.7)	C (30.0) C (25.8) F (103.0) F (80.7) E (58.7) F (87.3) E (64.1) D (41.7) D (40.0) C (30.9) D (47.6) E (75.8) E (59.3)	F (181.5) D (38.1) C (27.0) F (85.9) E (68.8) F (296.8) F (87.4) F (279.1) F (82.9) F (342.7) D (46.2) D (49.9) F (152.9)	F (342.9) D (41.9) C (32.1) E (68.5) E (61.8) F (284.2) E (66.2) E (78.6) D (54.2) F (86.4) F (209.8) F (95.6) F (243.3)	F (181.9) D (38.2) C (27.0) F (85.9) E (69.6) F (296.8) F (87.4) F (279.1) F (82.9) F (342.7) D (46.2) D (50.2) F (153.8)	F (346.4) D (42.1) C (32.1) E (68.5) E (61.9) F (284.2) E (78.6) E (78.6) D (54.2) F (86.4) F (209.8) F (95.8) F (243.6)
(7) Millstream Dr/ Land Bay 7 Driveway	Stop Sign	EBLR WBLR NBLT SBLT	N/A		B (10.3) N/A A (7.2) N/A	B (11.5) N/A A (4.6) N/A	N/A A (9.9) N/A A (7.5)	N/A B (10.4) N/A A (6.3)

Notes: (1) Analyses based on Synchro 7.
(2) Numbers in parentheses indicate average delay in seconds per vehicle for signalized intersections.
(3) Numbers in brackets indicate average delay in seconds per vehicle for stop sign controlled intersections.

Wells + Associates, Inc.
McLean, Virginia

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Table 2-2
Stone Ridge Commercial
Intersection Level of Service Summary (1) (2) (3)

Intersection	Intersection Control	Critical Movement	2008		2015			
			Existing		Currently Approved Program		Proposed Program	
			AM	PM	AM	PM	AM	PM
(8) Stone Springs Blvd/ Millstream Drive	Stop Sign 4-way	EBTL EBTR WBTL WBTR NBTL NBTR SBTL SBTR	B [10.7] A [8.3] A [8.7] B [11.9] B [12.2] B [10.6] A [10.0] A [9.3]	B [11.5] A [8.2] A [8.4] A [8.3] A [9.5] A [8.3] B [10.6] A [9.5]	N/A	N/A		
Background Improvement: Open existing turn lanes on Stone Springs, convert to two-way stop	Stop Sign 2-way	EBTLR WBTLR NBL SBL	N/A		F [9] F [456.6] A [8.9] B [10.8]	F [9] F [9] B [10.3] A [8.5]	F [9] F [9] A [8.7] B [10.9]	F [9] F [9] B [10.3] A [8.4]
(9) South Point Dr/ Site Office/Residential	Stop Sign	EBLTR WBLTR NBLTR SBTR	N/A		B [10.7] N/A A [7.9] A [0.0]	A [9.7] N/A A [6.7] A [0.0]	A [6.4] A [0.2] B [15.0] A [9.8]	A [3.1] A [2.0] B [13.9] B [10.4]
(10) Gum Spring Rd/ South Point Dr.	Stop Sign	EBT WBTR	N/A		N/A		A [0.0] A [0.0]	A [0.0] A [0.0]
(11) Gum Spring Rd/West Spine Road/ Tall Cedars Pkwy	Stop Sign	EBL EBR NBTL	C [19.6] A [9.7] A [3.6]	D [31.3] C [21.6] A [4.1]	N/A		N/A	N/A
Background Improvement: Install Signal Realign with West Spine Road Add NB/SB Through Lane	Signal	EBL EBR NBLT SBT SBS Overall	N/A		C (20.5) B (19.0) B (14.0) A (4.9) A (11.4) B (12.8)	C (26.2) F (92.0) C (34.1) B (17.9) A (11.4) C (32.9)	C (20.8) B (19.7) B (13.5) A (4.7) A (11.4) B (12.4)	C (25.8) F (95.5) C (34.6) B (18.0) A (11.4) C (33.8)
(12) Stone Springs Blvd/ Tall Cedars Pkwy	Stop Sign 4-way	EBLT EBTR WBTL WBTR NBTL NBTR SBTL SBTR	A [9.6] A [7.9] A [8.4] A [8.2] B [10.1] A [8.6] A [8.4] A [8.3]	A [8.2] A [7.1] A [8.0] A [7.3] A [8.0] A [7.3] A [8.2] A [7.6]	N/A	N/A		
Background Improvement: Open existing turn lanes on Tall Cedars, convert to two-way stop	Stop Sign 2-way	EBL WBTL NBLTR SBLTR	N/A		A [8.4] A [7.9] F [421.0] F [9]	A [7.8] A [7.8] F [9] F [9]	A [8.4] A [7.9] F [370.9] F [9]	A [7.8] A [7.8] F [9] F [9]
(13) Tall Cedars Pkwy/ Millstream Drive/Sandbar Terrace	Stop Sign	EBL WBTL NBLTR SBLTR	A [0.0] A [0.3] A [9.4] B [10.9]	A [0.3] A [3.1] A [9.4] B [10.8]	A [0.9] A [0.5] C [16.2] C [18.7]	A [7.7] A [7.5] B [10.7] C [15.0]	A [8.2] A [7.9] C [15.7] C [17.8]	A [7.7] A [7.7] B [10.8] B [13.8]
(14) Tall Cedars Pkwy/ Millstream Extended	Stop Sign	WBTL NBLTR SBLTR	N/A		N/A		A [7.6] B [10.1] B [12.1]	A [7.3] A [9.2] B [10.9]
(15) Millstream Extended/ Industrial Drive A	Stop Sign	EBLTR WBLTR NBLTR SBLTR	N/A		N/A		A [0.5] A [0.1] A [8.4] A [9.5]	A [0.4] A [1.4] A [9.0] A [9.8]
(16) Millstream Extended/ Industrial Drive B	Stop Sign	EBLTR WBLTR NBLTR SBLTR	N/A		N/A		A [0.0] A [0.1] A [8.5] A [9.8]	A [0.0] A [1.8] A [8.9] B [10.4]

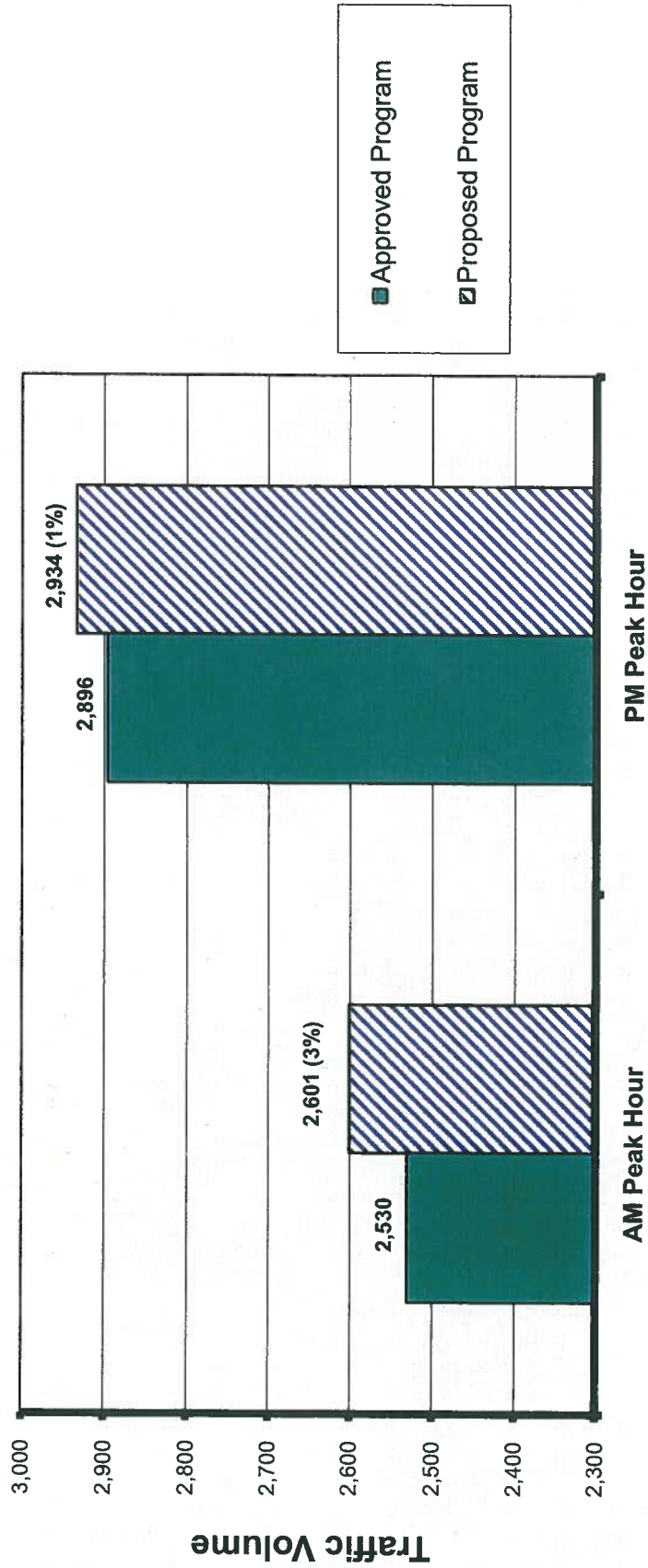
Notes: (1) Analyses based on Synchro 7.
(2) Numbers in parentheses indicate average delay in seconds per vehicle for signalized intersections.
(3) Numbers in brackets indicate average delay in seconds per vehicle for stop sign controlled intersections.

Table 5
Stone Ridge Commercial
Trip Generation Comparison

Program	AM Peak Hour			PM Peak Hour			Average Daily Traffic
	In	Out	Total	In	Out	Total	
Approved Program	1,231	1,299	2,530	1,404	1,492	2,896	39,327
Proposed Program	1,296	1,305	2,601	1,408	1,526	2,934	39,658
Difference	66	6	71	4	34	38	331
Percentage	5%	0%	3%	0%	2%	1%	1%

Notes: (1) Trip generation based on Institute of Transportation Engineers Trip Generation, 7th Edition.

Stone Ridge Commercial Trip Generation Comparison



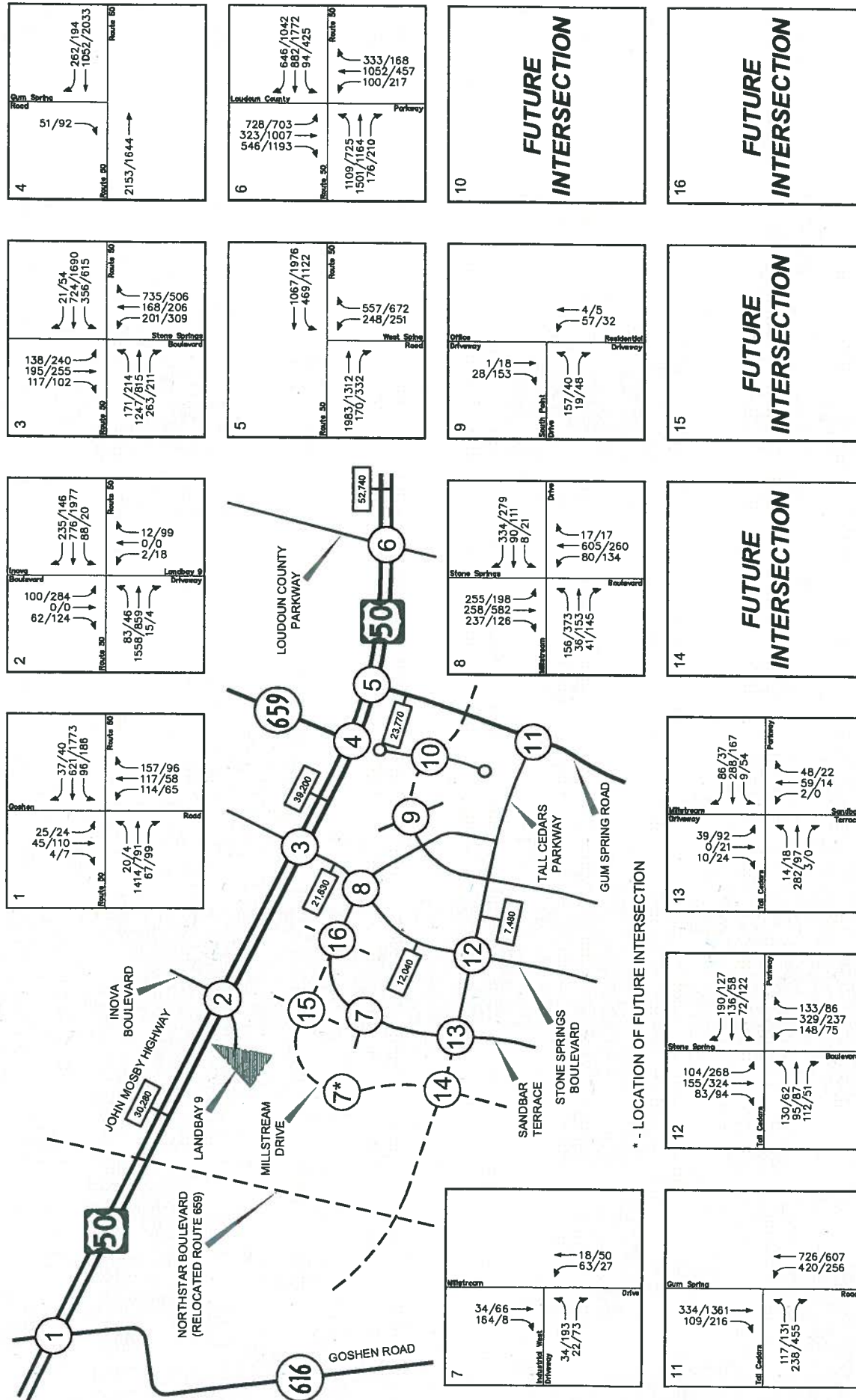


Figure 8
2015 Future Approved Traffic Forecasts

North
AM PEAK HOUR
000/000

ADT: Average Daily Trips

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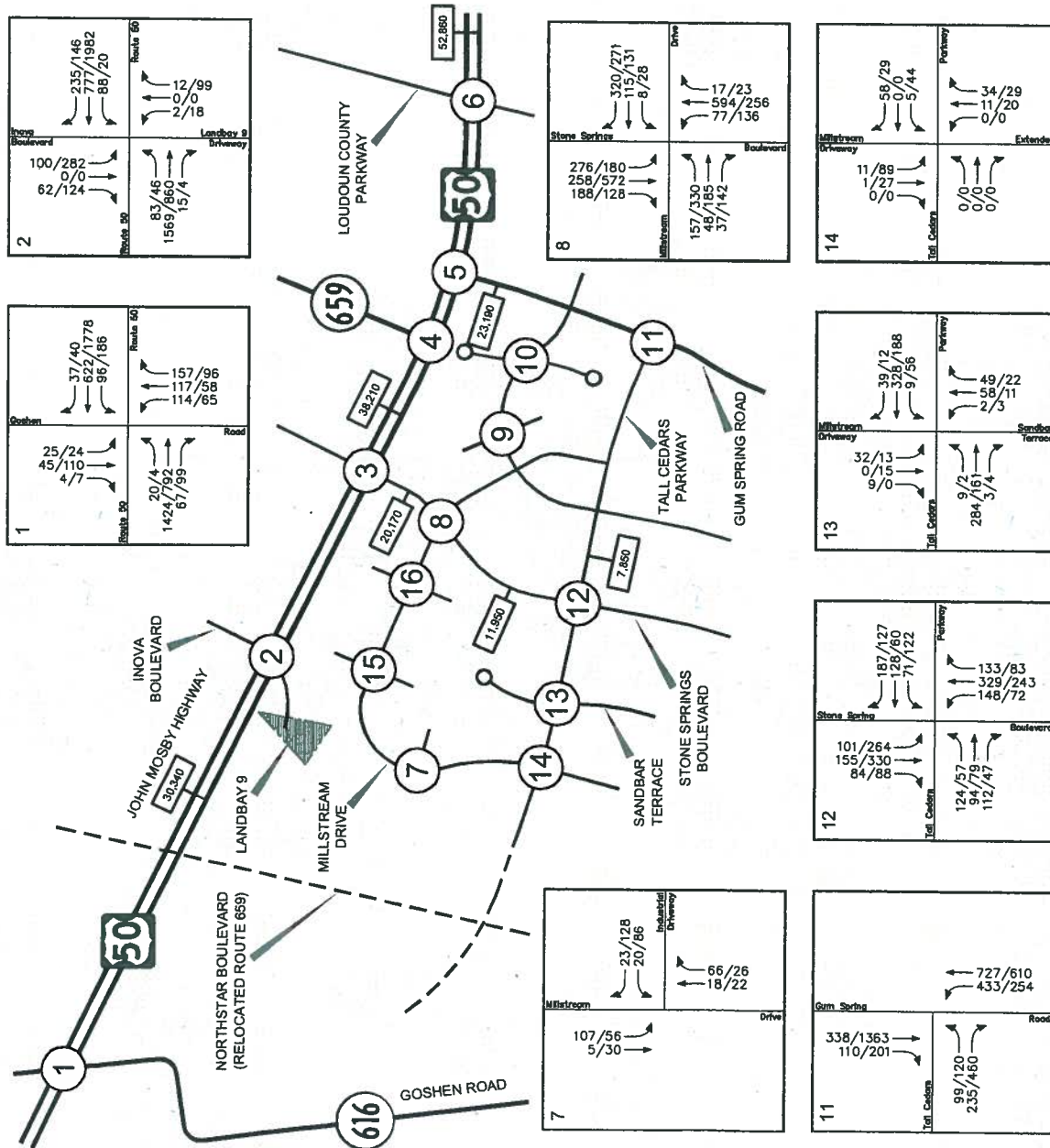


Figure 9
2015 Future Proposed Traffic Forecasts

ADT Average Daily Trips

PM PEAK HOUR
AM PEAK HOUR
000/000



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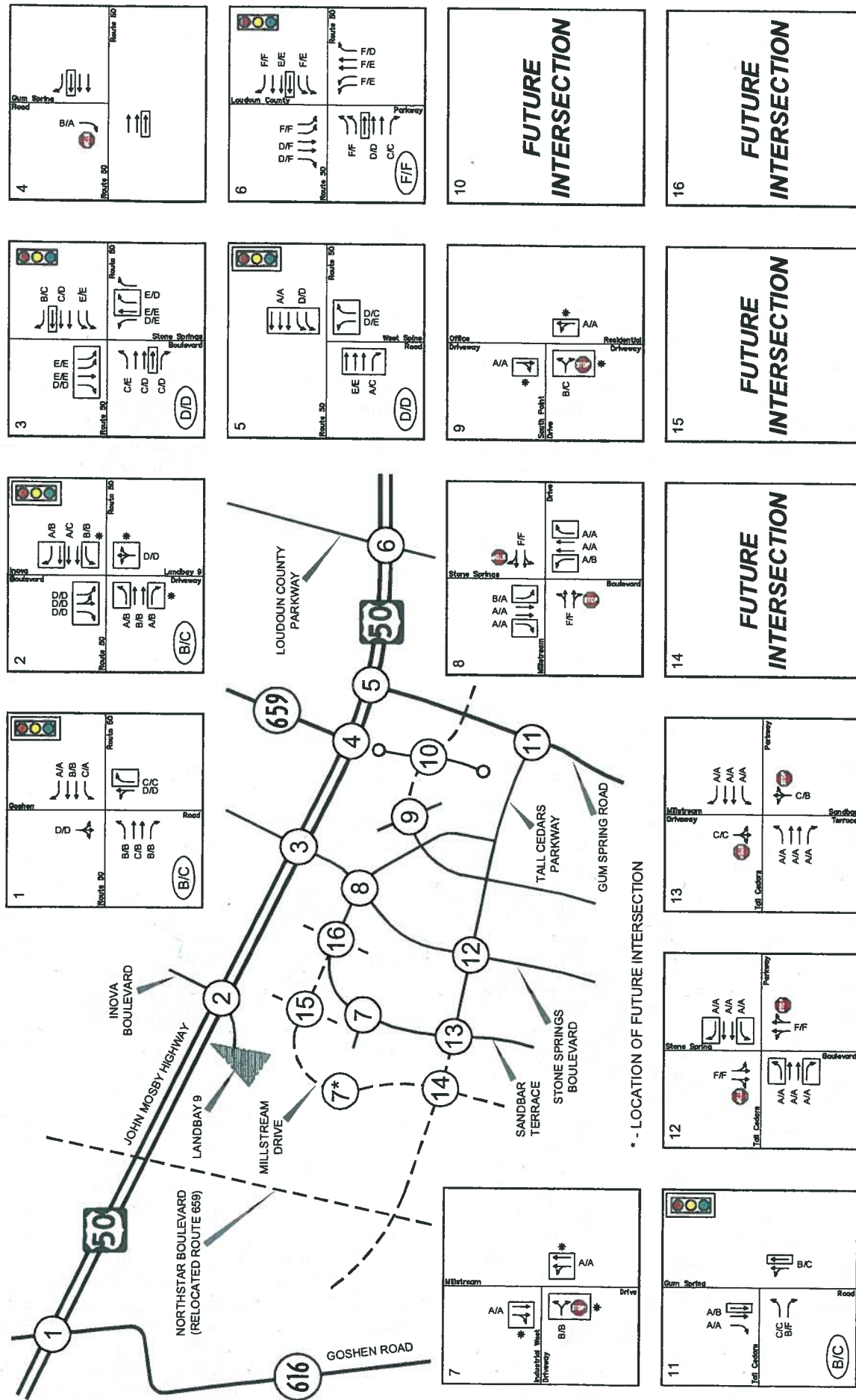


Figure 6
Future Approved Lane Use and Traffic Control and
Peak Hour Levels of Service

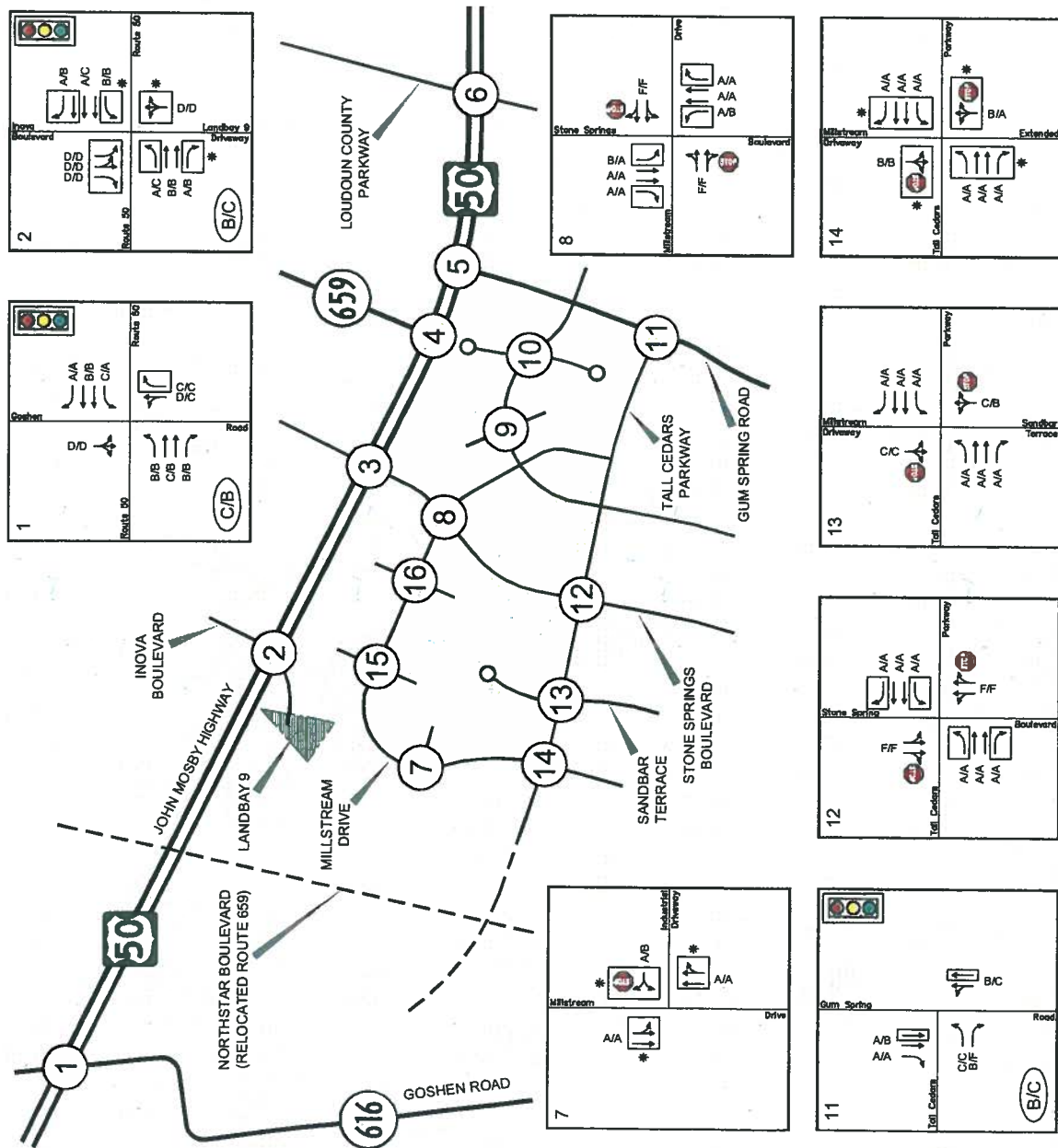


Figure 7
Future Proposed Lane Use and Traffic Control and
Peak Hour Levels of Service

XX Levels of Service
Overall Levels of Service
Proffered Improvement
Site Improvement

Represents One Travel Lane
Signalized Intersection
Stop Sign

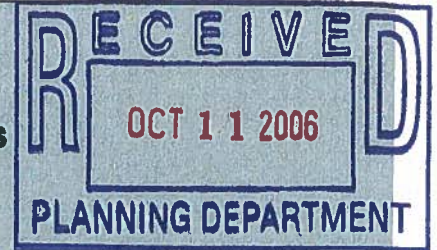


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County of Loudoun
Office of Transportation Services

MEMORANDUM



DATE: October 10, 2006

TO: Stephen Gardner, Project Manager
Department of Planning

FROM: Lou Mosurak, AICP, Senior Transportation Planner *Lm*

THROUGH: Art Smith, Senior Coordinator *AS*

SUBJECT: ZMAP 2006-0011, ZCPA 2006-0003—Stone Ridge Commercial
First Referral

Background

This rezoning application proposes changes to the approved Stone Ridge development that would result in a net increase of 307 multi-family residential dwelling units and roughly 4,000 additional sq ft of non residential uses (i.e., an increase of approximately 428,000 sq ft of office uses (PD-OP) and elimination of approximately 424,000 sq ft of light industrial uses (PD-IP) from currently approved plans (ZMAP 2002-0013 & ZCPA 2002-0004)). A summary of these proposed land use changes is provided as *Attachment 1*. Areas included in the subject application are located at two locations within the northern portion of Stone Ridge: (1) in the southwest quadrant of the intersection of Gum Spring Road (Existing Route 659) and John Mosby Highway (U.S. Route 50) and (2) west of Stone Springs Boulevard and north of Tall Cedars Parkway. A vicinity map is provided as *Attachment 2*. Changes to the existing intersection of Existing Route 659 and U.S. Route 50 as well as a significant realignment of Millstream Drive are proposed as part of this rezoning. In its consideration of this application, OTS reviewed materials received from the Department of Planning on August 7, 2006, including (1) a traffic impact study prepared by Wells & Associates, LLC, dated July 19, 2006; (2) a rezoning plan set (including a concept development plan (CDP)) prepared by Urban Engineering & Associates, Inc., dated April 7, 2006; and (3) approved Stone Ridge proffers and plan sets from ZMAP 1994-0017 and ZMAP 2002-0013.

Existing, Planned and Programmed Roads

U.S. Route 50 is currently a four- to six-lane median divided minor arterial with controlled access. The Revised Countywide Transportation Plan (Revised CTP) designates the ultimate condition of this segment of Route 50 (from Tall Cedars Parkway west to Route 659 Relocated) as a six-lane, median divided principal arterial limited access facility (R6M) in a 200-foot right-of-way. Grade-separated interchanges are planned at a number of locations, including the West Spine Road (east of this site) and Route 659 Relocated (west of this site). All at-grade access is planned to be terminated. A third eastbound lane of Route 50 from the

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West Spine Road east to Loudoun County Parkway was proffered as part of a previous Stone Ridge rezoning (ZMAP 2002-0013), and construction plans and profiles for this improvement are currently under review (CPAP 2006-0061). As currently proffered, construction of this improvement is scheduled to commence prior to issuance of the first zoning permit for residential units in Stone Ridge that are located west of the power lines (approved as part of ZMAP 2002-0013). Construction of a third westbound lane is being considered as part of other pending rezoning applications along the north side of Route 50.

Tall Cedars Parkway (the Route 50 South Collector Road) is currently a four-lane divided (U4M) major collector. In the vicinity of this site, it is currently constructed from its intersection with Gum Spring Road (Existing Route 659) west to the intersection with Millstream Drive (west of Tall Cedars Parkway). Tall Cedars is also constructed as a four-lane divided section within South Riding. Additional construction of Tall Cedars Parkway has been proffered to the east of South Riding as part of the approved East Gate rezoning, and to the west of South Riding as part of the approved Pinebrook Village (Avonlea) and Avonlea Plaza rezonings. The ultimate condition of Tall Cedars Parkway is a six-lane divided (U6M) major collector. Currently, there are no proffers to build the segment of Tall Cedars to the east of Stone Ridge (between Gum Spring Road and Pinebrook Road).

Gum Spring Road (Existing Route 659) is currently a two-lane undivided major collector road (R2). Ultimately, the Revised CTP envisions the segment of Gum Spring Road between Tall Cedars Parkway and Arcola to become a local road once the West Spine Road is constructed along a separate alignment. The Revised CTP calls for Gum Spring Road to be closed (and cul-de-sacs installed) both north and south of Route 50 once the West Spine Road is in place. The existing Gum Spring Road/Route 50 intersection is signalized and, according to the Applicant's traffic study, operates at an unacceptable level of service (LOS E) during the AM peak hour. Other recent traffic studies (e.g., Arcola Center), however, show that this intersection operates at LOS F during both the AM and PM peak hours.

West Spine Road will eventually replace existing Gum Spring Road (Existing Route 659) to the north of Tall Cedars Parkway. South of Tall Cedars Parkway, the West Spine Road generally follows the alignment of existing Route 659 and will be expanded to a four-lane (and ultimately a six-lane) divided major collector. North of Tall Cedars Parkway, the West Spine Road is planned to follow a new alignment slightly to the east of existing Gum Spring Road and will intersect Route 50 at a point approximately 1,000 feet east of the existing Gum Spring Road/Route 50 intersection. The Revised CTP depicts an interchange at this new intersection. To the north of Route 50, the West Spine Road is planned to continue north and join existing Route 606 at a near the existing location of the Route 606/Route 842 intersection. There are approved construction plans for the new West Spine Road alignment between Tall Cedars Parkway and Route 50, but right-of-way has not yet been acquired. Construction plans have also been approved for a four-lane section of this road (i.e., the West Spine Road/Existing Gum Spring Road) between Braddock Road and Tall Cedars Parkway.

Stone Springs Boulevard is a four-lane divided local road which functions as the main north-south road through Stone Ridge. It is a four-lane divided facility with a signalized intersection

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at Route 50. This intersection functions at an acceptable LOS (LOS D) during both the AM and PM peak hours.

Millstream Drive is a four-lane undivided local road within Stone Ridge, located between Tall Cedars Parkway and Route 50. It currently forms a partial loop within Stone Ridge, intersecting with Tall Cedars Parkway both east and west of Stone Springs Boulevard. The subject application proposes to realign the western segment of Millstream Drive to run east-west between Stone Springs Boulevard and Route 659 Relocated. The segment of Millstream Drive that currently runs north-south to Tall Cedars Parkway (west of Stone Springs Boulevard) would be abandoned.

Trip Generation by Proposed Application

The proposed rezoning would generate approximately 3,246 additional weekday average daily trips (an 8% increase) beyond those generated by the currently approved Stone Ridge development program. This figure includes 255 additional AM peak hour trips (10% increase) and 204 additional PM peak hour trips (7% increase). These figures are illustrated on the trip generation comparison included as *Attachment 3*. The traffic study notes that “the proposed development program would have less impact on the peak hour, peak direction trips since the largest shift in development density is proposed to be to employment uses” (part of Conclusion #2, Page 7). This is evidenced by the figures in *Attachment 3*, which show that a majority of the increased peak hour trips would flow into Stone Ridge in the AM peak and leave Stone Ridge in the PM peak.

Existing Traffic Volumes, Road Network Configuration and Levels of Service

Attachment 4 illustrates existing daily and peak hour traffic volumes and levels of service (LOS) in the vicinity of the subject site. *Attachment 5* shows existing lane use and traffic controls in the vicinity of the subject site. The study notes several unacceptable or failing peak hour LOS conditions for a number of locations included in the study area including the Route 50/Loudoun County Parkway intersection (signalized) as well as certain movements at the Gum Spring Road/Route 50 intersection (signalized). *Attachment 6* (Column 1) summarizes peak hour LOS at all intersections included in the study for existing the existing road network as well as for the currently approved and proposed road network (discussed further below).

Road Network Configuration and Levels of Service for Currently Approved Stone Ridge Development Program (2010)

Attachment 7 illustrates planned lane use and traffic controls in the vicinity of the subject site. This diagram reflects the road network as anticipated under the current Stone Ridge approvals (which are consistent with the adopted Revised CTP) and does not include road network changes proposed as part of the subject application (discussed further below). *Attachment 6* (Column 2) summarizes peak hour LOS at all intersections in the study area as anticipated under current approvals. *Attachment 8* depicts forecasted traffic (2010) on the currently-approved road network (i.e., Gum Spring Road is terminated and cul-de-sacs installed both north and south of Route 50).

Road Network Configuration and Levels of Service for Proposed Stone Ridge Development Program (2010)

Attachment 9 illustrates proposed lane use and traffic controls in the vicinity of the subject site. This diagram reflects modifications to the road network as proposed by the subject application, namely a right-in, right-out only lane configuration at Gum Spring Road and Route 50, and the re-alignment of Millstream Drive to remove its western segment connecting to Tall Cedars Parkway. *Attachment 6* (Column 3) summarizes peak hour LOS at all intersections in the study area as anticipated with the proposed development. *Attachment 10* depicts forecasted traffic (2010) on the proposed road network (i.e., existing Gum Spring Road realigned with Canary Grass Drive and maintains right-in, right-out only movements from eastbound Route 50). Please see the issues below for further discussion of the proposed realignment/reconfiguration of the existing Gum Spring Road/Route 50 intersection.

Transportation Issues

1. The application proposes to realign existing Gum Spring Road to create a T-intersection with a local road (Canary Grass Drive) approximately 300 feet south of the existing Gum Spring Road/Route 50 intersection, and proposes to remove the existing traffic signal and median crossover at the intersection of existing Gum Spring Road and Route 50, creating a right-in, right-out scenario to/from eastbound Route 50. This proposed right-in, right-out configuration is not acceptable as it is inconsistent with the adopted Revised Countywide Transportation Plan (Revised CTP), which calls for the ultimate condition of this segment of Route 50 to be limited access with grade separated interchanges at various locations, including the West Spine Road (approximately 1,000 feet to the east of the proposed right-in, right-out movement). The proposed right-in, right-out movement is not only inconsistent with the limited access policy but would also result in weave/merge conflicts with the future Route 50/West Spine Road interchange. A more acceptable configuration would be to extend Canary Grass Drive to tie into the east-west road (Southpoint Boulevard) approved as part of the adjacent Gum Spring Village Center development, with future access to the West Spine Road south of Route 50. The Applicant should coordinate this connection with Gum Spring Village Center.
2. Issues with right-of-way acquisition and construction of the proposed West Spine Road between Tall Cedars Parkway and Route 50 add additional complications and uncertainty to the interim and ultimate roadway configuration in this area. Although construction plans for a two-lane (northbound) section of the West Spine Road between Tall Cedars Parkway and Route 50 were approved by the County in 2002 (CPAP 2001-0184), no construction has commenced to date. No plans are currently on file for the remaining two (southbound) lanes of the West Spine Road between Route 50 and Tall Cedars Parkway. (Construction plans (CPAP-2002-0189) were approved by the County in 2004 for a four-lane section of Gum Spring Road from Tall Cedars Parkway south to Braddock Road, but no construction has commenced to date). It has been anticipated that existing Gum Spring Road and the West Spine Road would operate as a one-way pair of roads until all four lanes of the West Spine Road are completed between Tall Cedars and Route 50, but such a configuration has not been approved by VDOT. All approved construction plans

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show cul-de-sacs at both ends of the segment of existing Gum Spring Road between Tall Cedars Parkway and Route 50 (as envisioned by the currently-approved Stone Ridge development program and the approved Gum Spring Village Center special exception (SPEX 2003-0033, approved in 2004). Based on the anticipated cul-de-sacs at each end of this segment of Gum Spring Road, Gum Spring Village Center (as required by its SPEX condition of approval) has prepared and submitted to the County a traffic signal warrant study for its Southpoint Boulevard entrance onto Gum Spring Road, approximately 600 feet south of Route 50. The study finds that a traffic signal is not warranted at the proposed intersection. Given the situation with the West Spine Road and the likelihood that existing Gum Spring Road will remain open in its current condition for the foreseeable future, OTS strongly disagrees with this conclusion. Additional discussion and coordination on this matter and the overall status of the West Spine Road are necessary.

3. While the Applicant's traffic study indicates that the existing Gum Spring Road/Route 50 signalized intersection operates at LOS E during the AM peak hour, other traffic studies recently submitted to the County (e.g., Arcola Center) indicate that the intersection operates at LOS F during both the AM and PM peak hours. An explanation/clarification of this discrepancy needs to be provided.
4. Proffered improvements to Route 50 committed to as part of the previous Stone Ridge rezoning (ZMAP 2002-0013) should also be included with this proposal as "up front" improvements as the current application is also part of Stone Ridge and would add trips to the Route 50 corridor. These proffers include "up front" construction of the third eastbound lane of Route 50, roughly from Stone Ridge to Loudoun County Parkway (as described in ZMAP 2002-0013, Proffer II.B.3., November 30, 2005 Letter of Clarification), and improvements to the West Spine Road/Route 50 intersection (as described in ZMAP 2002-0013, Proffer II.B.4.(c), October 5, 2005 Proffer Statement).
5. Given existing and forecasted traffic volumes, grade-separated interchanges are an integral part to long-term transportation solutions in the Route 50 Corridor. Currently, a diamond interchange is envisioned at intersection of the West Spine Road and Route 50. The Applicant should provide a fair-share contribution towards this future improvement.
6. Staff has no issues with proposed re-alignment of Millstream Drive, provided that the future east-west segment intersects with Route 659 Relocated at a point sufficiently south of the planned interchange of Route 659 Relocated and Route 50.
7. The inclusion of 307 additional residential units as part of this application appears to be a reversal of Board action taken with the previous Stone Ridge rezoning (ZMAP 2002-0013), in which 216 residential units were eliminated and approximately 200,000 sq ft of non-residential uses were instead retained.
8. An appropriate transit contribution should be provided for the 307 residential units proposed on site.

Conclusion

OTS will offer a recommendation once it has reviewed the Applicant's responses to our comments.

ATTACHMENTS

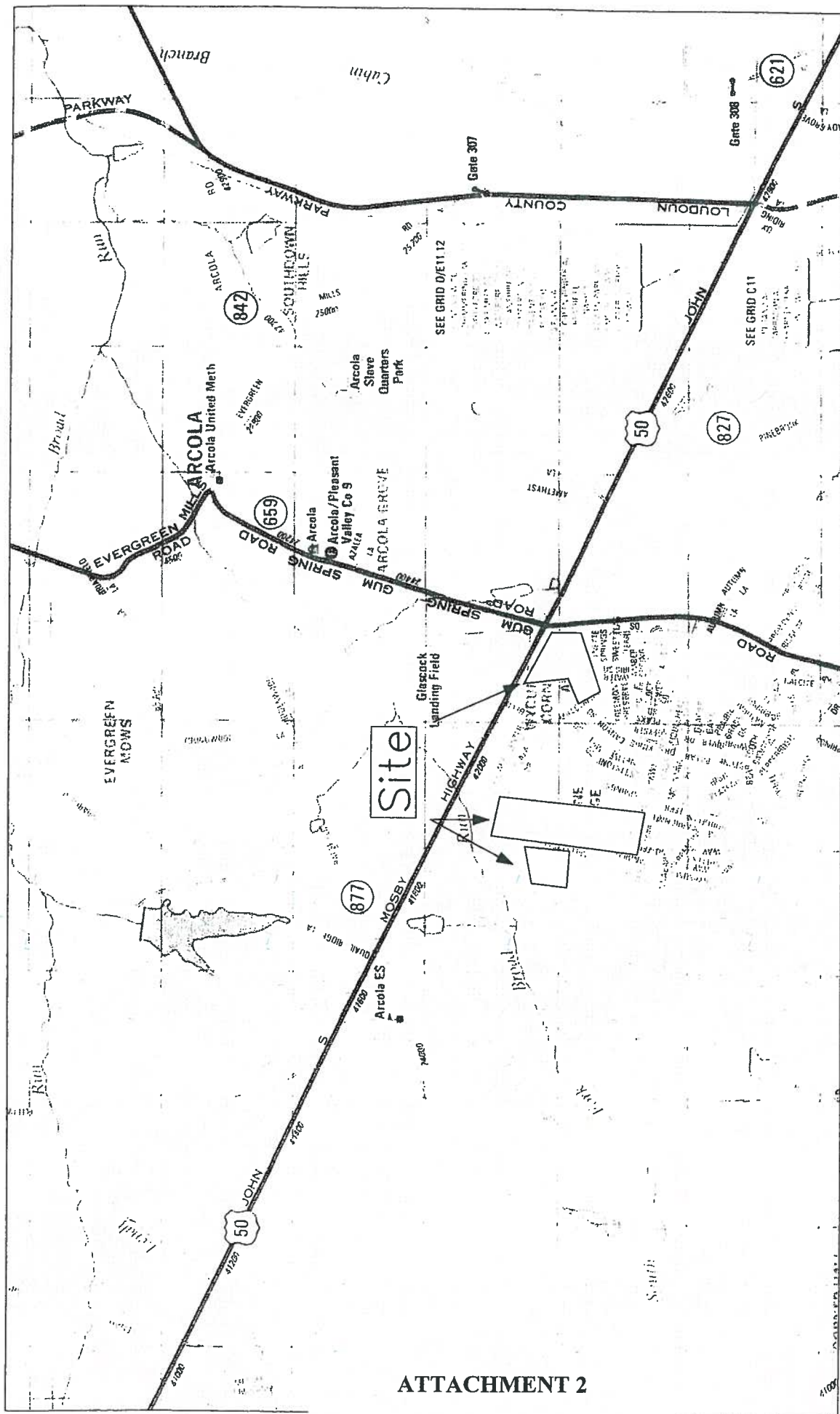
1. Stone Ridge Land Use Summary (Existing and Proposed Totals) (Traffic Study Table 1)
2. Vicinity Map (Traffic Study Figure 1)
3. Trip Generation Comparison (Traffic Study Table 5)
4. Existing Traffic Volumes (Traffic Study Figure 3)
5. Existing Lane Use and Traffic Control (Traffic Study Figure 4)
6. Intersection LOS Summary (Existing, Currently-Approved Program, and Proposed Program Scenarios) (Traffic Study Table 2)
7. Currently-Approved Program Lane Use and Traffic Control (Traffic Study Figure 6)
8. Currently-Approved Program Traffic Forecasts (Traffic Study Figure 8)
9. Proposed Program Lane Use and Traffic Control (Traffic Study Figure 7)
10. Proposed Program Traffic Forecasts (Traffic Study Figure 9)

cc: Dale Castellow, Director, OTS
Charles Yudd, Assistant to the County Administrator, County Administration

Table 1
Stone Ridge Commercial
Land Use Summary

Land Use	Existing		Proposed		Total	
	Totals	Units	Totals	Units	Change	Units
Single-Family Detached	853	D.U.	853	D.U.	0	D.U.
Townhouse/Condominium	1,741	D.U.	2,048	D.U.	+307	D.U.
Multi-Family	<u>671</u>	D.U.	<u>671</u>	D.U.	<u>0</u>	D.U.
Total Residential	3,265	D.U.	3,572	D.U.	+307	D.U.
Office (PD-OP)	269,800	S.F.	697,671	S.F.	+427,871	S.F.
Light Industrial (PD-IP)	570,250	S.F.	146,187	S.F.	-424,063	S.F.

Based on Concept Development Plan prepared by Urban Engineering, dated April 2006.



ATTACHMENT 2

Figure 1
Site Location

A160

Table 5
Stone Ridge Commercial
Trip Generation Comparison

Program	AM Peak Hour			PM Peak Hour			Average Daily Traffic
	In	Out	Total	In	Out	Total	
Approved Program	1,273	1,306	2,579	1,377	1,492	2,869	38,834
Proposed Program	1,467	1,366	2,834	1,434	1,639	3,073	42,080
Difference	194	60	255	58	146	204	3,246
Percentage	15%	5%	10%	4%	10%	7%	8%

Notes: (1) Trip generation based on Institute of Transportation Engineers Trip Generation, 7th Edition.

A161

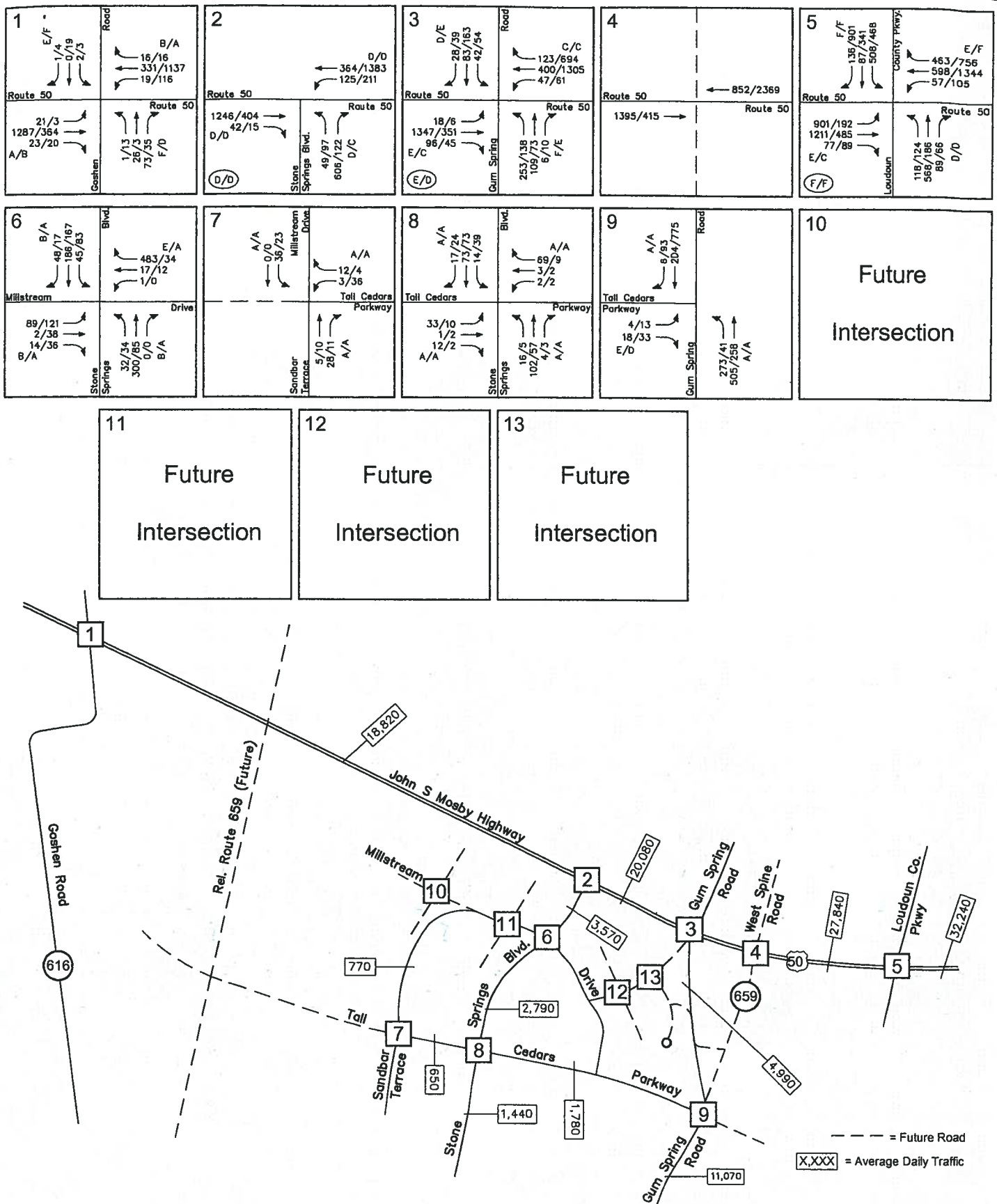


Figure 3
Existing Traffic Volumes

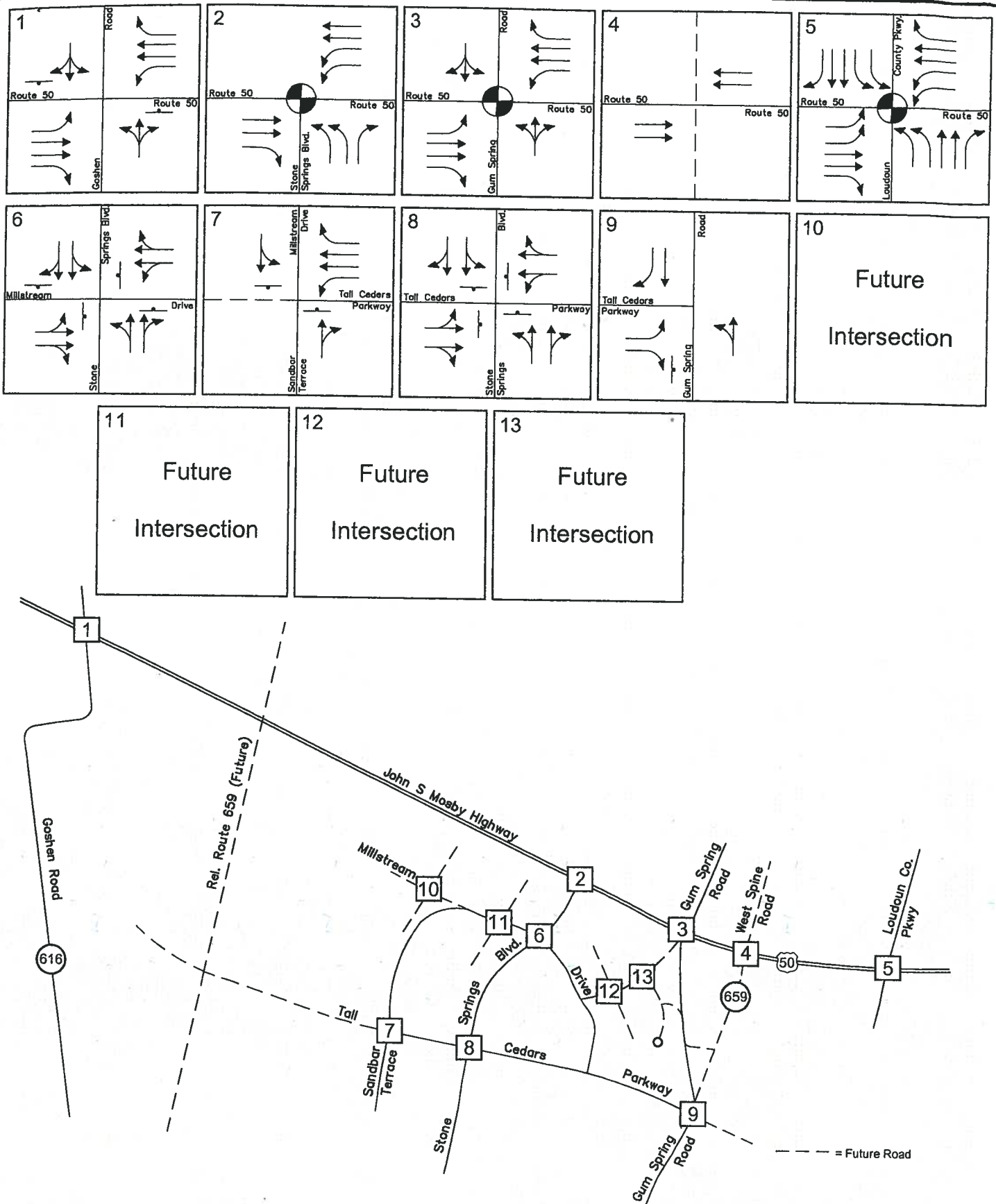


Figure 4
Existing Lane Use and Traffic Control

ATTACHMENT 5

Stone Ridge Commercial
Loudoun County, Virginia

AM PEAK HOUR
PM PEAK HOUR
000/000



A163

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

Table 2
Stone Ridge Commercial
Intersection Level of Service Summary (1) (2) (3)

(COLUMN 1) (COLUMN 2) (COLUMN 3)

Intersection	Intersection Control	Critical Movement	2008		2010		Proposed Program	
			Existing		Currently Approved Program		Proposed Program	
			AM	PM	AM	PM	AM	PM
(1) U.S. Route 50/ Goshen Road	Stop Sign	EB WB NB SB	A(8.1) B(13.2) F(66.8) E(47.8)	B(11.7) A(8.8) D(32.5) F(106.1)	A(8.7) C(16.4) F(1) F(1)	C(19.8) B(10.3) F(1) F(1)	N/A	N/A
Mitigated	Signal	EB WB NB SB Overall	N/A	N/A	A(8.7) A(6.4) D(52.2) D(48.7) B(10.9)	A(4.5) C(24.8) D(51.8) D(52.8) B(18.9)	A(9.9) A(8.4) D(52.2) D(48.7) B(11.0)	A(8.1) C(25.7) D(51.8) D(52.8) C(20.7)
(2) U.S. Route 50/ Stone Springs Blvd	Signal	EB WB NB Overall	D(53.1) D(37.1) D(43.3) D(47.2)	D(38.9) D(49.0) C(28.1) D(45.2)	E(59.6) D(52.2) F(116.2) E(74.2)	E(85.8) E(56.7) C(26.6) D(52.8)	N/A	N/A
Mitigated	Signal	EB WB NB Overall	N/A	N/A	C(26.0) C(22.7) A(8.9) C(20.1)	D(43.8) D(35.2) A(6.0) C(30.3)	C(27.8) C(23.3) A(9.8) C(21.8)	D(40.8) C(35.0) A(6.7) C(30.0)
(3) U.S. Route 50/ Gum Spring Rd (VA 659)/ Canary Grass Drive	Signal	EB WB NB SB Overall	E(59.7) C(25.5) F(142.1) D(49.9) E(63.4)	C(23.4) C(32.8) E(59.9) E(64.1) D(35.8)	N/A	N/A	A(0.0) A(0.0) A(9.0) A(9.0) N/A	A(0.0) A(0.0) B(10.1) A(9.0) N/A
(4) U.S. Route 50/ West Spine Road	Signal	EB WB NB SB Overall	N/A	N/A	B(14.7) F(146.4) F(107.0) C(32.0) E(87.8)	F(556.4) F(313.6) C(32.9) F(127.9) F(285.9)	D(38.7) C(30.1) D(40.5) C(28.7) C(34.4)	D(38.8) F(166.6) C(34.2) F(145.8) F(119.6)
Mitigated	Signal	EB WB NB SB Overall	N/A	N/A	D(38.2) C(29.7) D(39.2) C(26.5) C(33.9)	F(88.4) F(115.3) D(40.9) E(83.8) F(83.6)	D(39.0) C(32.4) D(44.6) C(30.1) D(37.3)	F(98.2) F(127.3) D(41.6) E(84.2) F(100.7)
(5) U.S. Route 50/ Loudoun County Pkwy (Old Ox Road)	Signal	EB WB NB SB Overall	E(81.4) E(57.9) D(40.4) F(308.4) F(94.4)	C(25.0) F(122.3) D(38.8) F(147.3) F(108.7)	F(83.7) F(189.3) F(184.7) F(282.0) F(159.2)	C(34.8) F(169.2) F(170.6) F(418.8) F(228.4)	N/A	N/A
NB, SB, and WB Free Flow Right Turns	Signal	EB WB NB SB Overall	N/A	N/A	F(80.7) D(40.2) F(159.7) E(188.8) F(96.8)	D(38.8) F(89.9) F(131.0) E(165.5) F(112.0)	F(80.7) D(42.2) F(159.7) F(165.8) F(96.9)	D(39.1) F(100.3) F(131.0) E(165.5) F(112.9)
(6) Stone Springs Blvd/ Millstream Drive	Stop Sign	EB WB NB SB	B(11.7) E(43.2) B(13.3) B(12.3)	A(9.4) A(7.5) A(6.3) A(9.2)	C(24.1) F(313.0) F(60.0) F(197.4)	F(248.4) D(26.7) D(25.5) F(53.1)	N/A	N/A
Mitigated	Signal	EB WB NB SB Overall	N/A	N/A	C(20.5) C(23.3) A(8.9) B(14.3) B(15.3)	B(16.5) A(9.1) A(8.0) C(21.2) B(18.1)	C(22.8) C(25.0) A(8.0) B(15.3) B(18.4)	C(23.8) A(9.9) C(22.5) C(28.8) C(24.4)
(7) Tall Cedars Pkwy/ Millstream Drive/ Sandbar Terrace	Stop Sign	EB WB NB SB	N/A A(7.2) A(8.8) A(9.0)	N/A A(7.3) A(9.0) A(9.4)	A(9.0) A(7.7) A(9.7) B(12.1)	A(7.5) A(7.4) A(8.7) B(10.8)	A(8.6) A(7.5) A(9.1) D(26.3)	A(0.0) A(7.7) B(14.5) F(61.5)
Future	Signal	EB WB NB	N/A	N/A	N/A	N/A	N/A	N/A
(8) Tall Cedars Pkwy/ Stone Springs Blvd	Stop Sign	EB WB NB SB	A(7.5) A(8.8) A(7.3) A(7.1)	A(7.2) A(8.5) A(8.8) A(7.0)	A(5.4) A(7.3) F(1) F(1)	A(5.8) A(7.1) F(117.5) F(268.7)	N/A	N/A
Mitigated	Signal	EB WB NB SB Overall	N/A	N/A	A(8.7) A(9.8) A(9.0) A(7.8) A(8.9)	A(9.4) B(10.4) A(5.3) A(5.7) A(7.0)	A(6.9) B(10.0) A(9.0) A(7.8) A(6.9)	A(9.0) B(10.1) A(6.0) A(9.8) A(7.5)
(9) Gum Spring Rd/ Tall Cedars Pkwy	Stop Sign	EB WB NB SB	B(14.4) N/A A(4.8) A(0.0)	C(19.2) N/A A(2.1) A(0.0)	F(1) F(1) C(20.9) A(0.0)	F(1) F(1) E(41.8) A(0.0)	N/A	N/A
Mitigated	Signal	EB WB NB SB Overall	N/A	N/A	D(37.5) D(43.3) B(15.5) D(36.2) C(25.6)	D(49.1) D(52.8) B(14.5) C(27.8) C(26.5)	D(37.5) D(43.3) B(15.2) D(38.2) C(25.4)	D(42.8) D(47.3) B(16.2) C(24.3) C(24.8)
(10) Millstream Dr/ Site Industrial/Office	Stop Sign	EB WB NB	N/A	N/A	A(0.0) A(7.8) A(9.0)	A(0.0) A(7.4) B(11.5)	A(0.0) A(3.5) A(9.1)	A(0.0) A(4.7) B(14.5)
(11) Millstream Dr/ Site Retail/Library	Stop Sign	EB WB NB SB	N/A	N/A	A(7.8) A(9.2) A(7.8) A(9.1)	C(18.3) C(18.4) B(13.2) D(25.7)	N/A	N/A
Mitigated	Signal	EB WB NB SB Overall	N/A	N/A	A(5.3) A(8.0) A(8.9) A(7.3) A(8.0)	B(11.1) B(10.8) A(9.8) B(11.3) B(10.6)	A(4.7) A(6.0) A(6.8) A(9.2) A(5.9)	B(11.0) A(9.7) A(9.1) B(13.0) B(10.6)
(12) Canary Grass Dr/ Site Office/Residential	Stop Sign	EB WB NB SB	N/A	N/A	B(11.0) N/A A(8.4) A(7.8)	A(8.2) N/A A(7.7) A(8.3)	B(10.1) A(7.1) A(8.0) A(8.0)	A(4.0) A(4.9) B(10.2) B(11.8)
Mitigated	Stop Sign	EB WB NB SB	N/A	N/A	N/A	N/A	A(8.8) A(0.0) B(14.2) B(13.6)	A(4.0) A(4.9) B(10.2) B(11.8)
(13) Canary Grass Drive/ Gum Spring Rd	Stop Sign	EB WB NB	N/A	N/A	N/A	N/A	A(6.9) A(0.0) A(7.6)	A(7.2) A(0.0) A(7.4)

Notes: (1) Analysis done using Synchro 8.0.
(2) Numbers in parentheses indicate average delay in seconds per vehicle for signalized intersections.
(3) Numbers in brackets indicate average delay in seconds per vehicle for stop sign controlled intersections.

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O:\Projects\3001-3500\3088 Stone Ridge Commercial\Graphics\3088 Rpt Graphics.dwg/CA

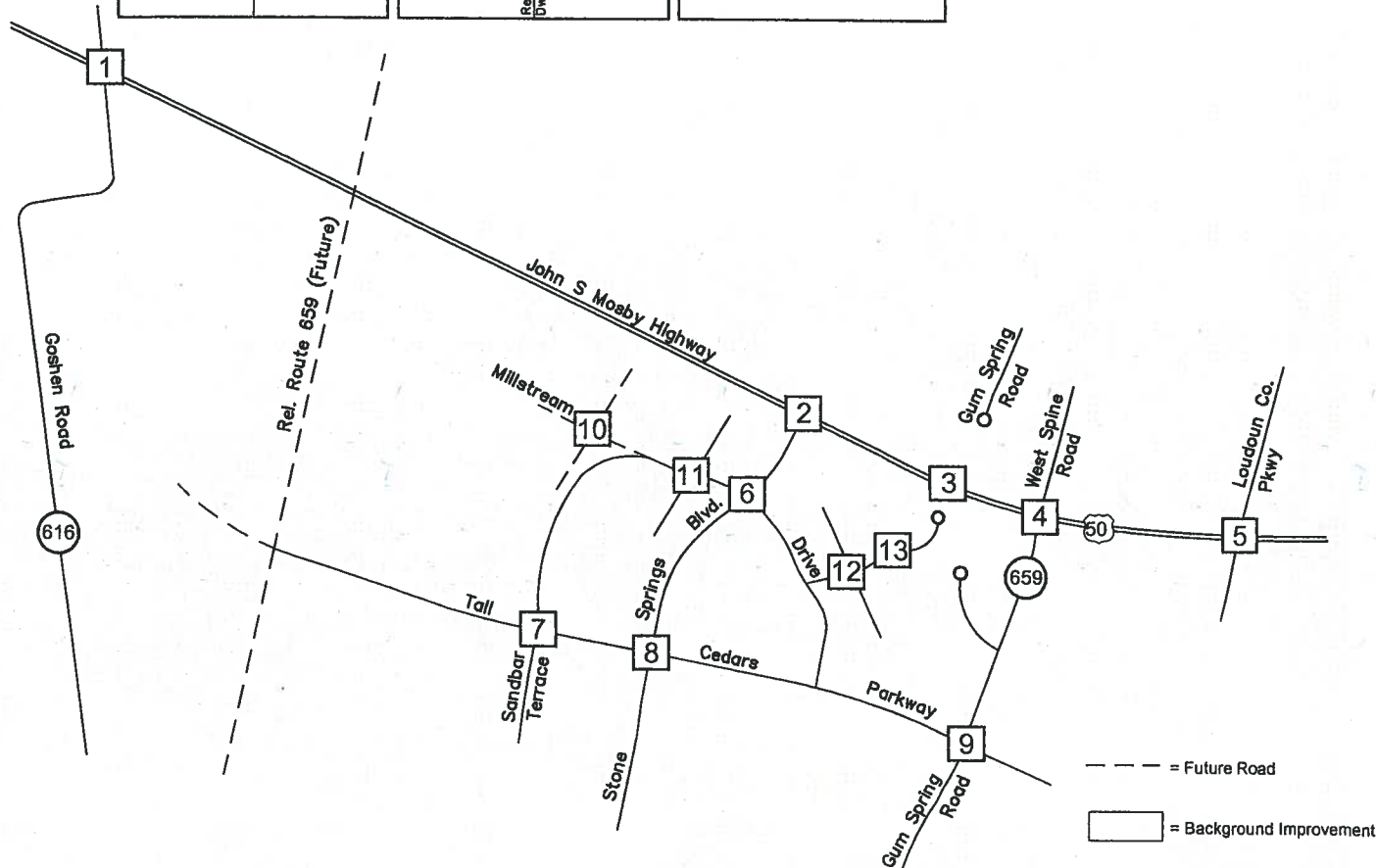
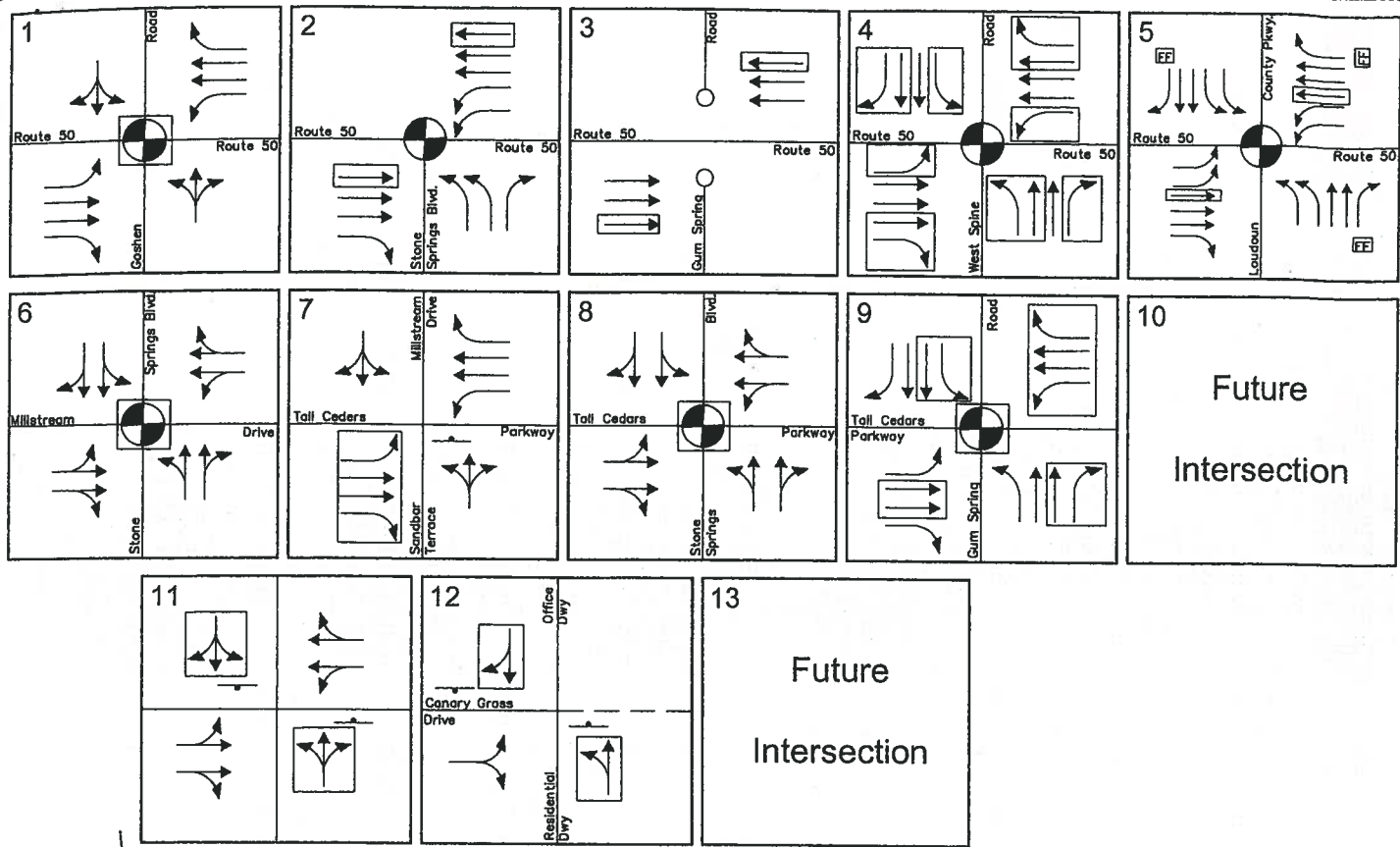
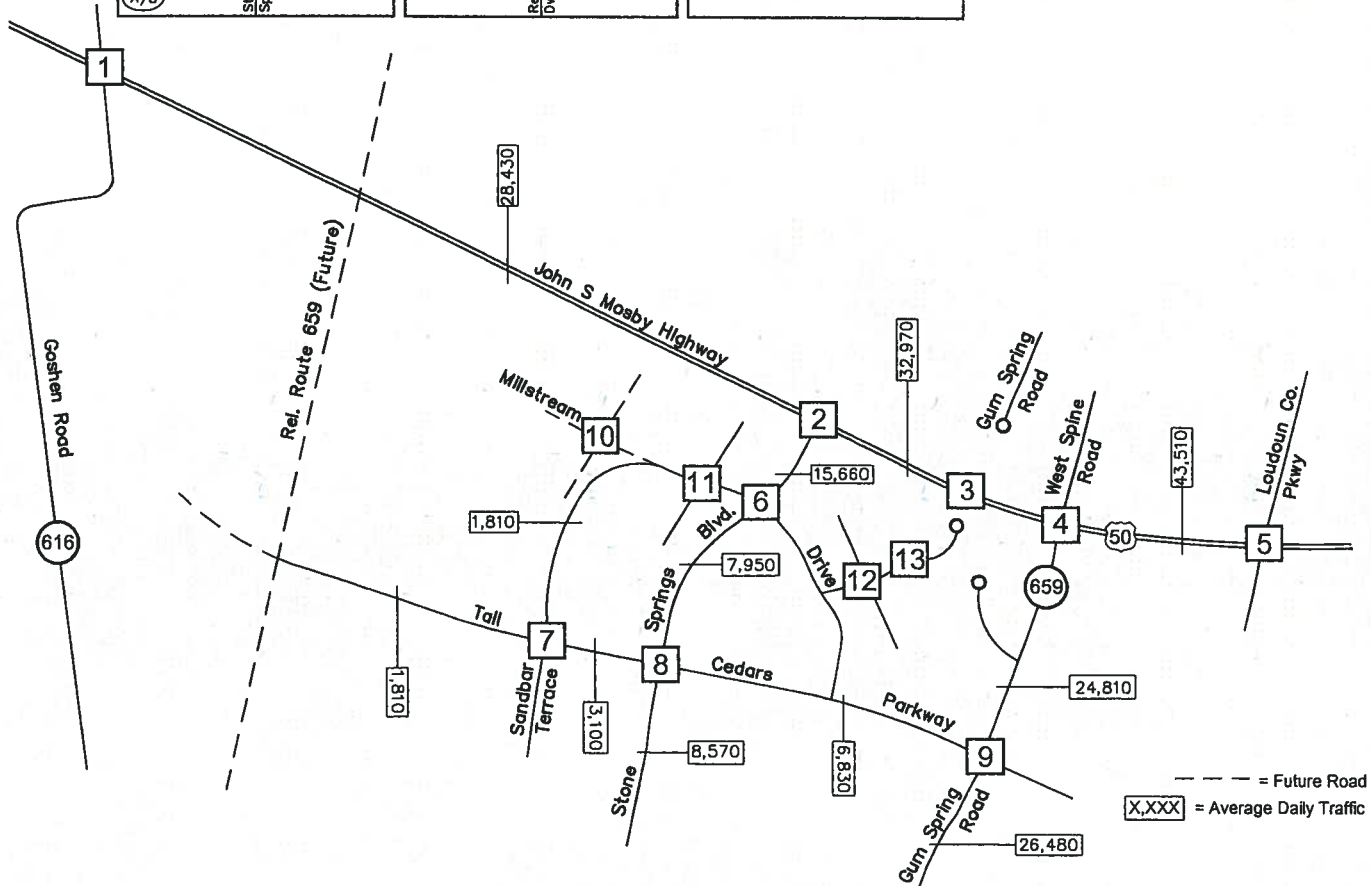
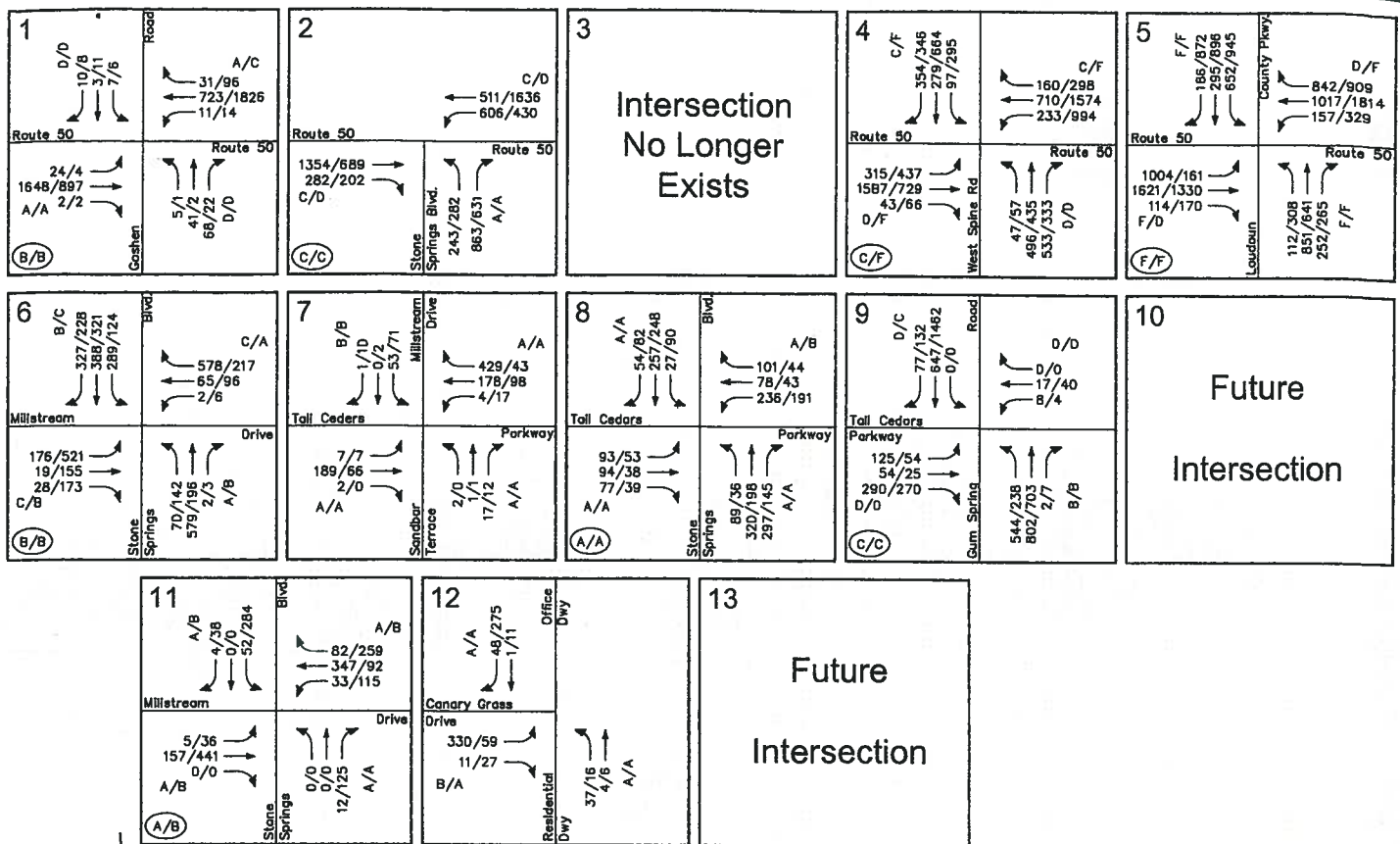


Figure 6
Approved Program Lane Use and Traffic Control

AM PEAK HOUR
PM PEAK HOUR
000/000





--- = Future Road
X,XXX = Average Daily Traffic

Figure 8
Approved Program Traffic Forecasts

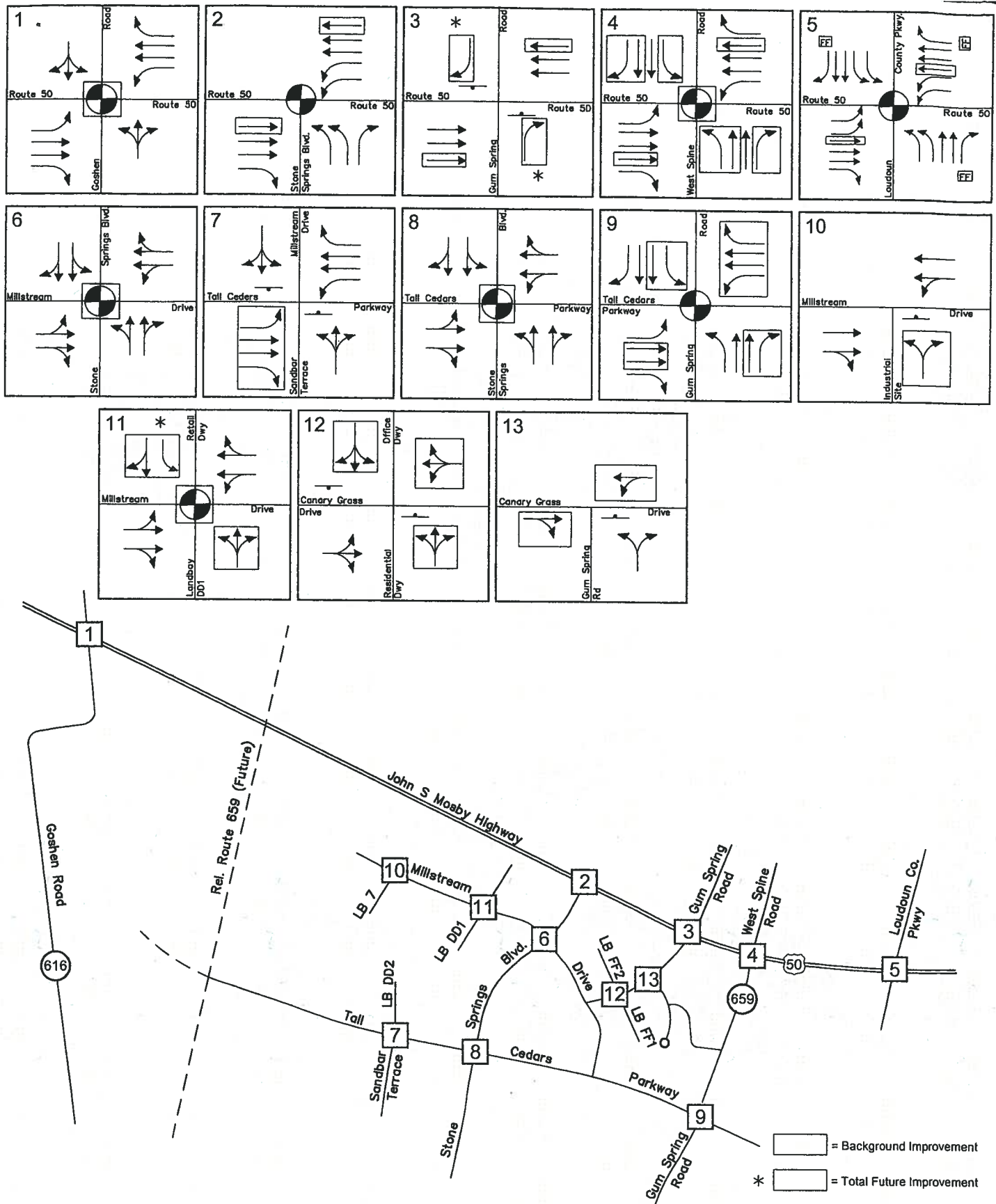


Figure 7
2010 Proposed Program Lane Use
and Traffic Control

ATTACHMENT 9

Stone Ridge Commercial
Loudoun County, Virginia

AM PEAK HOUR
PM PEAK HOUR
000/000



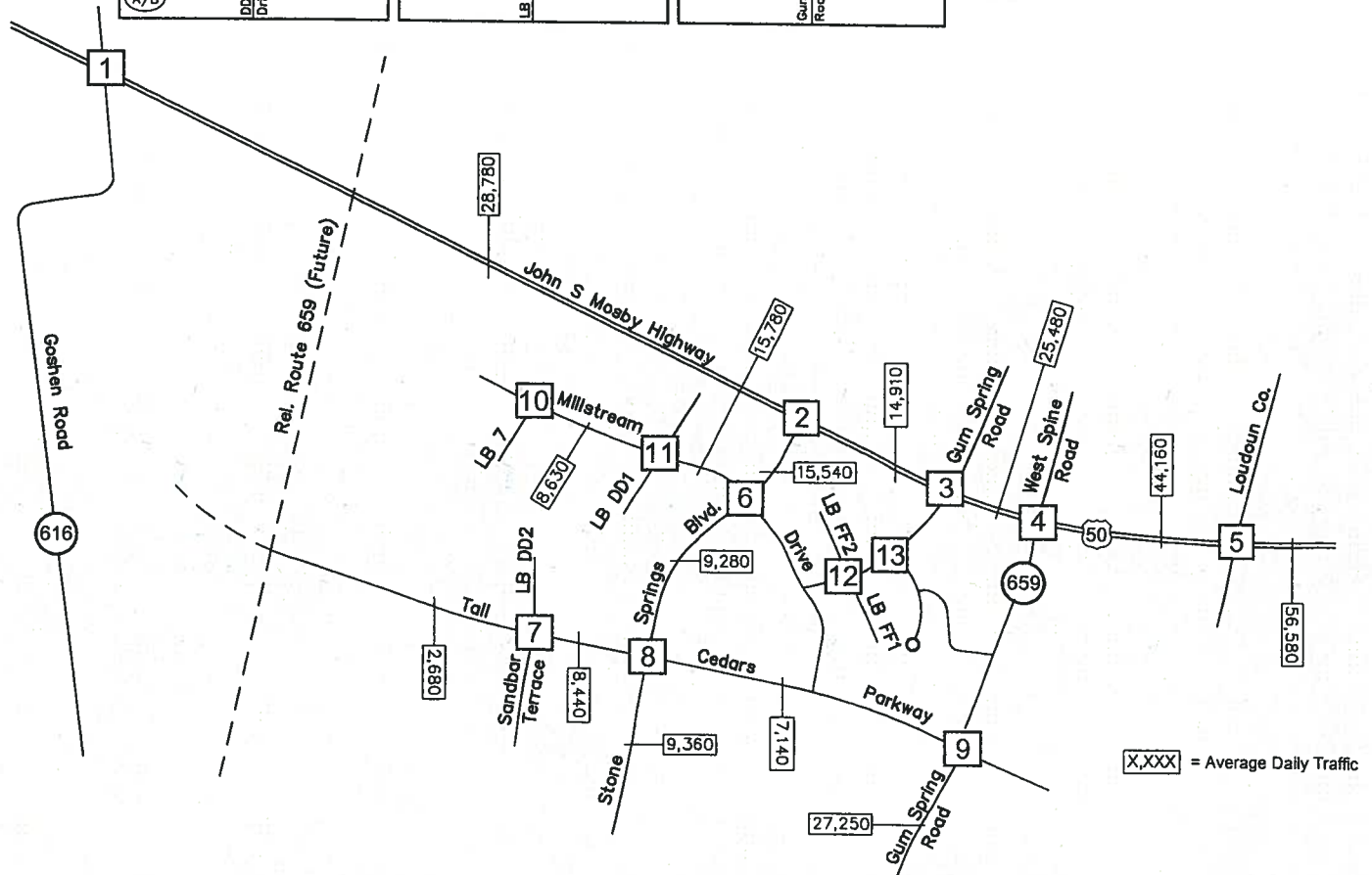
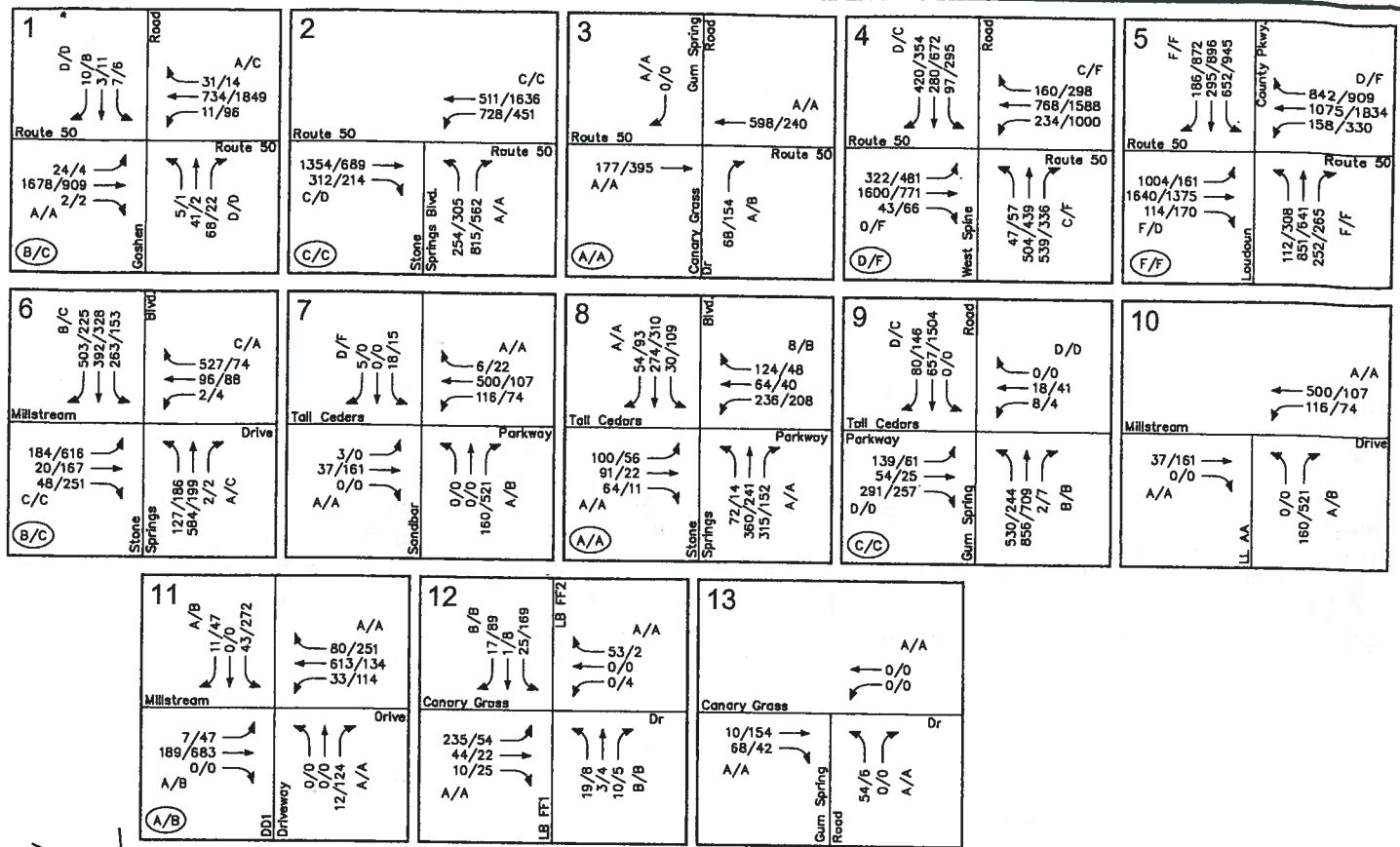


Figure 9
Proposed Program Traffic Forecasts



COMMONWEALTH of VIRGINIA

DAVID S. EKERN, P.E.
COMMISSIONER

DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)

July 21, 2009

Mr. Stephen Gardner
County of Loudoun
Department of Planning
1 Harrison Street, S.E.
P.O. Box 7000
Leesburg, Virginia 20177-7000



Re: Stone Ridge Commercial
(3rd Submission Amended Application)
Loudoun County Application Numbers ZMAP 2006-0011 and ZCPA 2006-0003

Dear Mr. Gardner:

We have reviewed the above noted application as requested in your June 22, 2009 transmittal. We offer the following comments:

1. All traffic signals and signal modifications costs associated with this application are to be borne by the applicant. Verbiage to this effect should be included in the proffers including the associated warrant analyses. The intersection of particular interest has Level of Service (LOS) "F" on the side streets and is the following:
 - a. Stone Springs Boulevard/Tall Cedars Parkway
2. Please see the attached memorandum dated 07/16/2009 from Mr. Arsalan (Alex) Faghri of VDOT's Traffic Engineering Section regarding the Traffic Study Impact Update (TIS).
3. Please see the attached e-mail dated Monday, July 13, 2009 from Rahul Trivedi, P. E. of VDOT's Transportation Planning Section.

If you have any questions, please call me at (703) 383-2061.

Sincerely,


John Bassett, P.E.
Transportation Engineer

Attachments

cc: Imad Salous, P. E.

ATTACHMENT 19

A-169

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Memorandum

To: John Bassett, P.E.

From: Arsalan (Alex) Faghri

CC: Jim R. Turner, P.E.

Date: 07/16/2009

Re: RUID 11281 – Stone Ridge Commercial – Rt. 50 and Gum Spring Road (Rt. 659) – ZMAP 2006-0011 & ZCPA 2006-0003

This review pertains to second submission memorandum associated with the subject project. The memorandum provides analysis for modifying land parcels within the approved and mostly constructed site that would result in an increase of 133 S.F. It also serves as an addendum to a TIA submitted to VDOT for review in September 2006. It must be noted that the applicant never responded to the September 2006 comments and therefore the validity of the TIA is still undetermined.

The analysis provided on the June 16, 2009 memorandum is generally acceptable.

Existing peak hour volumes depicted on Figure 3 were checked and is consistent with the raw collected data.

Future volume for “Approved” and “Proposed” were verified and is generally consistent with the approved growth rates plus volume generated by background developments.

Capacity analysis utilizing Synchro was checked. It is consistent with the provided data. Further, proposed geometry provides sufficient capacity for the generated volumes.

We have stamped the memorandum as **Review complete**. We are retaining the one copy you provided for our records. Please call if you have any questions.

From: Trivedi, Rahul, P.E.
Sent: Monday, July 13, 2009 12:11 PM
To: Bassett, John (NOVA)
Cc: Llana, Claudia, P.E.; Dabestani, Cina
Subject: RE: Stone Ridge Commercial - Revised Traffic Impact Analysis (TIA); Loudoun County

We have reviewed the subject TIA and our previous comments have been addressed. VDOT supports the new proffer for a 100 space commuter lot as the existing lot is filling up.

Thank you for providing the opportunity to review and comment on the TIA.

Rahul

Rahul Trivedi P.E.
VDOT, Northern Virginia District
Transportation Planning Section
Chantilly, VA - 20151
Phone-703-383-2223

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COMMONWEALTH of VIRGINIA

DAVID S. EKERN, P.E.
COMMISSIONER

DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)

April 9, 2009

Mr. Stephen Gardner
County of Loudoun
Department of Planning
1 Harrison Street, S.E.
P.O. Box 7000
Leesburg, Virginia 20177-7000

Re: Stone Ridge Commercial
(2nd Submission Amended Application)
Loudoun County Application Numbers ZMAP 2006-0011 and ZCPA 2006-0003

Dear Mr. Gardner:

We have reviewed the above noted application as requested in your February 12, 2009 transmittal. We offer the following comments:

1. Eliminate the newly proposed right-in/right-out access point to Route 50.
2. **The Traffic Impact Study (TIS) needs to be revised to include a "Recommendations" Section. A complete and thorough review cannot be conducted until this aspect of the TIS is completed. Receipt of this information may generate additional comments.**
3. All traffic signals and signal modifications costs associated with this application are to be borne by the applicant. Verbiage to this effect should be included in the proffers including the associated warrant analyses. The intersections of particular interest have Level of Service (LOS) "F" on the side streets and are the following:
 1. Stone Springs Boulevard/Tall Cedars Parkway
 2. Stone Springs Boulevard/Millstream Drive.
4. The north-south traffic volume on Gum Springs Road, Route 659 is significant. If the complete Future Route 659 West Spine Road is not open to traffic by the time South Point

A173

Drive connects to existing Route 659, Gum Springs Road then left and right turn lanes will be required on existing Route 659, Gum Springs Road.

5. Please see the attached memorandum dated 03/19/2009 from Mr. Arsalan (Alex) Faghri of VDOT's Traffic Engineering Section regarding the Traffic Study Impact Update (TIS) dated January 26, 2009. These comments indicate that the TIS needs correction and re-submission.
6. Please see the attached e-mail dated Friday, April 3, 2009 from Mr. Cina Dabestani of VDOT's Transportation Planning Section. These comments indicate that the TIS needs correction and re-submission.

If you have any questions, please call me at (703) 383-2061.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Bassett", with a stylized flourish extending from the end.

John Bassett, P.E.
Transportation Engineer

Attachments

cc: Imad Salous, P. E.

A174

Memorandum

To: John Bassett, P.E.

From: Arsalan (Alex) Faghri

CC: Jim R. Turner, P.E.

Date: 03/19/2009

Re: RUID 10804 – Stone Ridge Commercial – Rt. 50 and Gum Spring Road (Rt. 659) – ZMAP 2006-0011 & ZCPA 2006-0003

We have reviewed first submission Traffic Impact Analysis (TIA) associated with the subject project. The project is located on the southwest corner of Rt. 50 and Gum Spring Road (Rt. 659). A TIA was originally submitted in 2006 which was reviewed and commented by VDOT TES.

The application proposes to rezone and/or modify land parcels within the site to result in an increase of more than 2 KSF of commercial space.

We offer the following comments:

1. All VDOT comments dated September 29, 2006 still applies. Please modify the study to address those comments.
2. Please justify 2% growth rates.

We have stamped the study as ***Rejected, correct and resubmit.*** We are retaining the one copy you provided for our records. Please call if you have any questions.

Bassett, John

From: Dabestani, Cina
Sent: Friday, April 03, 2009 11:26 AM
To: Bassett, John
Cc: Llana, Claudia, P.E.
Subject: Stone Ridge Commercial - Revised TIA

John:

In accordance with §15.2-2222.1 of Code of Virginia Traffic Impact Analysis Regulations, 24 VAC 30-155, a traffic impact analysis was prepared by Wells & Associates Incorporated for the proposed Stone Ridge Commercial development dated January 26, 2009. This report was submitted as an update to TIS reported originally submitted in July 19, 2006 on behalf of Van Metre Companies.

TP has evaluated this traffic impact analysis for compliance with the above noted code and offer following comments:

1. Page 12 – Other Approved Developments – South Riding and South Village developments are way out of the area to have any impact on this study. These two development should not be included as the background traffic generator impacting roadways that are impacted by this development (Stone Ridge Commercial).
2. Page 22 – Trip Distribution Analysis – Assumption of the distribution will stay the same is FALSE. There is no support provided for such assumption other than stating other previous studies were the base!! It is incomplete without providing what the studies show for distribution patterns.
3. Page 27 – 2030 Loudoun County Model Analysis – this section provides the raw & unadjusted traffic assignment of Loudoun County Model without any analysis. Raw and unadjusted traffic volumes are very misleading as in this case, VA 606 relocated just to the south of US 50 is shown to carry 63,731 ADT when VA 659 (Gum Spring Road) parallel to VA 606 relocated is shown to carry 93,693. A review of these numbers reveals adjustments are needed as part of VA 606 will make up Dulles Airport's future "loop" along with VA 28 and US 50 which is expected to have heavier traffic volume than VA 659 (Gum Spring Road). Loudoun County's model has been updated with round 7.1 land use for the horizon year of 2030 which is close enough for 22 years plus build out year, fulfilling the requirements on study's of this magnitude.
4. This report does not provide any 2030 traffic impact analysis as the original submission did not either. US 50 is a NHS and long range impact analysis are a requirements by FHWA which VDOT oversee.

The comments noted above require correction and resubmission of the supplemental traffic analysis however Loudoun County's approval of no need for future traffic impact analysis is well documented!

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Thanks,
Cina Dabestani
Sr. Transportation Engineer
NoVa Transportation Planning Section
Virginia Department Of Transportation
703 . 383 . 2215

A177

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COMMONWEALTH of VIRGINIA

DAVID S. EKERN, P.E.
COMMISSIONER

DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)



February 16, 2007

Mr. John Merrithew
County of Loudoun
Department of Planning
1 Harrison Street, S.E.
P.O. Box 7000
Leesburg, Virginia 20177-7000

Re: Stone Ridge Commercial
(1st Submission)
Loudoun County Application Number ZMAP 2006-0011 and ZCPA 2006-0003

Dear Mr. Merrithew:

We have reviewed the above noted application as requested in your August 4, 2006 transmittal. We offer the following comments:

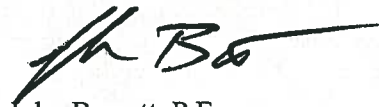
1. Please provide draft proffers for review.
2. Applicant should dedicate right of way and construct Route 50 improvements consistent with one-half of the ultimate typical section (R6M) as specified in the Loudoun *Countywide Transportation Plan (CTP)* to a point to where they tie-in with other compatible, proffered improvements (either by this developer or by others).
3. Applicant should dedicate right of way and construct Relocated Route 659 and the West Spine Road and Tall Cedars Parkway per the ultimate conditions as specified in the *CTP* through at least the limits of Stone Ridge property and preferably to a point to where they tie-in with other compatible, proffered improvements (either by this developer or by others).
4. The applicant should provide a pro-rata monetary contribution to be applied towards area transportation improvements.
5. Please clearly label Relocated Route 659 as such on the plan sheets.

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6. Dimension distance from Realigned Millstream Drive/Relocated Route 659 intersection to the closest intersections to the north and south. Ensure adequate crossover spacing on Relocated Route 659 as identified in the CTP.
7. **The Traffic Impact study (TIA) needs to be revised to include a "Recommendations" Section. A complete and thorough review cannot be conducted until this aspect of the TIA is completed. Receipt of this information may generate additional comments.**
8. All traffic signals and signal modifications costs associated with this application are to be borne by the applicant. Verbiage to this effect should be included in the proffers.
9. Have designs been submitted/approved for the ultimate planned interchanges at Route 50/West Spine Road and at Route 50/659 Relocated?
10. Related to comment # 9: This applicant should dedicate any necessary right of way and provide monetary contribution towards design/construction of the cited interchanges.
11. The north-south traffic volume on Gum Springs Road, Route 659 is significant. This roadway should not be abandoned or terminated or realigned until an adequate replacement facility is in place. There is a note on sheet 8 of 10 that we recommend be directly incorporated into the proffers for this application.
12. We recommend Transportation Demand Management (TDM) measures be incorporated into the proffers for the office portion of this application.
13. Provide typical sections for Millstream Drive and Canary Grass Drive.
14. Please see the attached e-mail dated Friday, September 29, 2006 from Ms. Tina Ho of VDOT's Traffic Engineering Section.
15. Please see the attached e-mail dated Friday, September 15, 2006 from Mr. Cina Dabestani of VDOT's Transportation Planning Section.
16. Please see the attached e-mail dated Monday, August 28, 2006 from Robert McDonald, P. E. of VDOT's Transportation Planning Section

If you have any questions, please call me at (703) 383-2061.

Sincerely,



John Bassett, P.E.
Transportation Engineer

Attachments

cc: Mr. Sam Allaire

A180

From: Ho, Tien-Jung (Tina), P.E.
Sent: Friday, September 29, 2006 3:07 PM
To: Bassett, John
Cc: Suliman, Kamal S.; VanPoole, Thomas B., P.E.
Subject: Stone Ridge Commercial, Rte 50/Gum Spring Rd, Plan#ZMAP 2006-001/ZCPA 2006-0003, TE#6492

Dear Mr. Bassett:

TE has received the TIA for the subject location. TE provides the following comments:

1. Be specific on transportation improvements proffered by whom and the year.
2. Transportation improvements can not be included unless those improvements have been programmed.
3. Provide LOS and delay summary tables for each lane group
4. Provide build-out years, trip distribution, and traffic assignment in summary tables for each other developments
5. Need to show how traffic volumes redistributed due to roadway connections.
6. 1% of growth rate seems too low.
7. Internal trip and pass-by trip reductions need to follow the guidelines in VDOT's Land Development Manual.
8. Need to show the impacts of proposed modifications to regional roads
9. Show the distance in-between intersections
10. Show site trip distribution and site trip assignment in figures
11. The developer is responsible for the improvements at site entrances, surrounding intersections and roadways due to the impacts from site traffic.
12. Provide queuing analyses. Queuing analyses need to show if the queues will exceed the existing or the proposed turn lane and also needs to address blocking situation.
13. For signalized intersection analysis, the minimum acceptable level of service criteria shall be applied to each lane group.
14. If the analysis indicates that unsatisfactory levels of service will occur on study area roadways, improvements must be recommended to remedy deficiencies.
15. Provide a response letter

Let me know if you have any questions.

Tien-Jung "Tina" Ho, P.E.
Senior Transportation Engineer
VDOT-Northern Operations Region
Traffic Engineering Section
14685 Avion Parkway, Suite 210
Chantilly, VA 20151-1104
Phone: 703-383-2416
Fax: 703-383-2410
Email: Tien-Jung.Ho@VDOT.Virginia.gov

A181

From: Dabestani, Cina
Sent: Friday, September 15, 2006 9:57 PM
To: Bassett, John
Cc: Llana, Claudia, P.E.
Subject: Stone Ridge Commercial TIA - comments

John:

Thank you providing TP with the opportunity to comment on this study.

After reviewing the study, TP recommends that methodology exercised to be modified by utilizing regionally accepted transportation model specially given the magnitude of this development (rezoning). In this case, Loudoun County Model is recommended to be the starting point.

The advantages of this recommendation is that it would reduce the support/document needed for many factors assumed in this study. This study has assumed many factors with hardly any support or documentation such as, through trip growth factor and internal trip reduction factor.

Please feel free to contact me directly should you have any questions on the above comments.

Thank you,
Cina S. Dabestani
Senior Transportation Engineer
Transportation Planning
Northern Virginia Department of Transportation
703 . 383 . 2215
Cina.Dabestani@VDOT.Virginia.Gov

A182

Bassett, John

From: McDonald, Robert, P.E.
Sent: Monday, August 28, 2006 4:52 PM
To: Llana, Claudia, P.E.
Cc: Bassett, John
Subject: FW: Stone Ridge Commercial Development - Rezoning Application and TIA; Loudoun County

Will forward to you in case Cina can review. Some of my concerns (I admit that I have not gone thru the material in detail) to consider as he reviews:

- Is the proposed development generally in the COG Cooperative Forecast?
- Does the traffic analysis make reasonable assumptions as to the origins and destinations of traffic (or does it assume all new residents work within the development and the problems vanish)?
- Does the analysis consider the impact on Fairfax County (improvements to US 50 in Loudoun are fine, but if traffic comes to a halt at the county line, what have we accomplished)?
- Is the analysis reasonable from a technical viewpoint?

No deadline for comments has been given, but Cina should work this project in fairly quickly and give his comments directly to John Bassett. I doubt that Land Development's WAS codes will work for us -- he can probably charge time to TP603 (document / study review) since there is no UPC for this work.

From: Bassett, John
Sent: Monday, August 28, 2006 11:06 AM
To: Suliman, Kamal S.; McDonald, Robert, P.E.
Cc: Spriggs, Sylvia A.
Subject: Stone Ridge Commercial Development - Rezoning Application and TIA; Loudoun County

RE: Stone Ridge Commercial
Traffic Impact Analysis (TIA)
(1st Submission)
ZMAP 2006-0011 and ZCPA 2006-0003

We are forwarding to you for review and comment the above noted TIA. We have also included a copy of the rezoning application plan and Statement of Justification as well as some other pertinent correspondence.

A183

Please return any written comments and/or stamped/marked-up plan copies to the Land Development Sections for dissemination.

If you have any questions or need additional information, please advise.

Time Charge: WAS Activity # 00042

Thank You,

John Bassett
X-32061

A-184



LOUDOUN COUNTY, VIRGINIA
Department of Fire, Rescue and Emergency Management

803 Sycolin Road, Suite 104 Leesburg, VA 20175
Phone 703-777-0333 Fax 703-771-5359



MEMORANDUM

To: Stephen Gardner, Project Manager
From: Maria Figueroa Taylor, Fire-Rescue Planner
Date: July 9, 2009
Subject: Stone Ridge – Commercial, Third Referral
ZMAP 2006-0011 & ZCPA 2006-0003

Thank you for the opportunity to review the Applicant's response to the Department of Fire, Rescue and Emergency Management's referral dated April 13, 2009.

Staff concurs with the referral submitted by the Office of Capital Construction/Proffer Matrix Group regarding Proffer III.G.4 and respectfully requests that the applicant revise the proffer statement to reflect the recommendations of the proffer matrix group.

The Fire and Rescue Planning Staff has no additional comments regarding this application. If you have any questions or need additional information, please contact me at 703-777-0333.



C: Project file

Teamwo

ATTACHMENT 1h

vice

A-185

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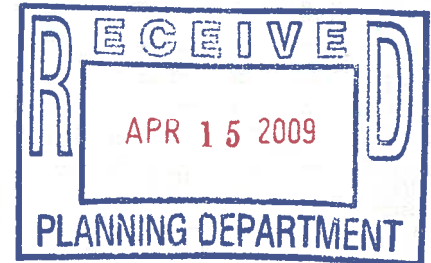
Loudoun County, Virginia
Department of Fire, Rescue and Emergency Management

803 Sycolin Road, Suite 104 Leesburg, VA 20175
Phone 703-777-0333 Fax 703-771-5359



Memorandum

To: Stephen Gardner, Project Manager
From: Maria Figueroa Taylor, Fire-Rescue Planner
Date: April 13, 2009
Subject: Stone Ridge -- Commercial
ZMAP 2006-0011 & ZCPA 2006-0003



Thank you for the opportunity to review the above captioned application.

The Applicant has proffered a 3.376 acre parcel for public use (less than the endorsed Service Plan's requirement of 5 acres). Staff is concerned that the size of the parcel would not be enough to accommodate all the program requirements, and ensure adequate circulation and deployment of emergency vehicles.

The Department of Fire, Rescue and Emergency Management has no immediate plans to construct an additional fire station as it is not part of the current CIP or CNA documents. Currently fire-rescue services are being provided to the Dulles Planning Subarea by the Dulles South Public Safety Center FS19 and The Arcola-Pleasant Valley Volunteer Fire-Rescue Company FS9. In the future, the planning subarea will be served by a total of four stations as the Brambleton Public Safety Center FS26 is currently at the site plan stage of design and Kirkpatrick Farms FS27 opens in early 2014. The proffer site at Stone Ridge can be considered for a future station since it would benefit service delivery as it improves response times and alleviates some existing coverage voids.

Staff concurs with the referral submitted by the Office of Capital Construction/Proffer Matrix Group regarding the timing of conveyance, any additional site work that would be performed prior to conveyance, timing of utilities, site issues etc. Staff respectfully requests that the applicant revise the proffer statement to reflect the recommendations of the proffer matrix group regarding the before mentioned issues.

The Fire and Rescue Planning Staff is available to meet and/or provide the Applicant with additional information regarding our comments. If you have any questions or need additional information, please contact me at 703-777-0333.

C: Project file

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A188



**ARCOLA-PLEASANT VALLEY
VOLUNTEER FIRE DEPARTMENT**



April 14, 2009

Ms. Maria Taylor
Fire-Rescue Planner
Department of Fire, Rescue & Emergency Management
803 Sycolin Road
Suite 104; Mail Stop #61
Leesburg, VA 20175

Subject: Contribution/Proffer Comments on:
Stone Ridge Commercial
ZMAP 2006-0011 & ZCPA 2006-0003
Second Submission

Dear Ms. Taylor:

The subject application requests approval for rezoning to permit the additional construction of 2,400 square feet of non-residential floor area for commercial and retail purposes. The project is within the primary fire and rescue service delivery area of the Arcola-Pleasant Valley Volunteer Fire Department (APVVFD).

One of the main elements of this revised application is a commitment to dedicate the proposed PD-IP Land Bay to the County for use as a Fire/Rescue Station. The APVVFD is pleased to recognize the applicant for this contribution in our efforts to relocate our current station to better provide the Dulles South communities in delivering prompt fire/rescue services.

WE HEREBY REQUEST that our Department be afforded the opportunity to review and approve any revised documents related to fire and rescue contributions regarding this application. Should you have any further questions regarding our comments, please contact me at (703) 380-3378.

Page 2 Contribution/Proffer Comments on: Stone Ridge Commercial

Sincerely,

A handwritten signature in black ink, reading "Michael V. Kalasnickas". The signature is fluid and cursive, with the first name "Michael" and last name "Kalasnickas" clearly legible.

Michael V. Kalasnickas, Staff Assistant and Proffer Coordinator

cc: Stephen Gardner, Project Manager, Dept. of Planning
APVVFD File

MVK/mvk

A190

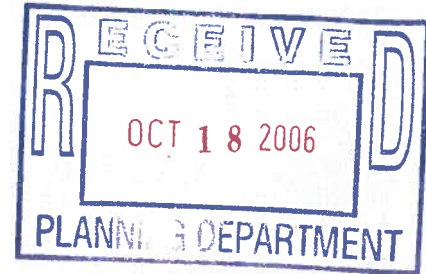


LOUDOUN COUNTY, VIRGINIA
Department of Fire, Rescue and Emergency Management
803 Sycolin Road, Suite 104 Leesburg, VA 20175
Phone 703-777-0333 Fax 703-771-5359



MEMORANDUM

To: Stephen Gardner, Project Manager
From: Maria Figueroa Taylor, Fire-Rescue Planner
Date: October 17, 2006
Subject: Stone Ridge -- Commercial
ZMAP 2006-0011 & ZCPA 2006-0003



Thank you for the opportunity to review the above captioned application.

The Fire Marshal's Office provided the following comments and recommendations:

- The FMO advocates the use of sprinklers systems in all structures, even when not required by the International Building Code.
- The burning of construction debris is strictly prohibited

The Fire-Rescue GIS and Mapping coordinator offered the following information regarding estimated response times:

PIN	Project name	Arcola VFRC Station 9 Travel Time
205-36-2224	Stone Ridge	1 minute, 7 seconds

Travel Times for each project were calculated using ArcView and the Network Analyst extension to calculate the distance in miles. This distance was then doubled to provide an approximate travel time for a Fire or EMS unit to reach each project site. To get the total response time another two minutes were added to account for dispatching and turnout. This assumes that the station is staffed at the time of the call. If the station is unoccupied, another one to three minutes should be added.

Project name	Approximate Response Time for Arcola VFRC Station 9
Stone Ridge	3 minutes, 7 seconds

The Arcola Pleasant Valley Volunteer Fire and Rescue Company provided the following comments and recommendations:

- The applicant shall require all builders to provide and install a residential fire sprinkler system for each residential unit constructed; provided that the water supply system to any such residence has sufficient capacity to support the sprinkler system. All model homes utilized by the applicant and/or builder on the property for marketing purposes shall be constructed with a residential sprinkler system. All marketing information packets shall include promotional materials on the benefits of automatic fire sprinkler systems offered by the manufacturer of residential fire sprinkler systems, and United States Fire Administration.
- The applicant shall contribute an initial base sum of money of \$250.00 per unit for each residential unit, and an initial base sum of \$0.20 per gross square foot, per story of non-residential buildings and shall escalate in accordance with the CPI beginning with the base year 1988. The initial contribution shall be payable to the County of Loudoun at the time of issuance of the zoning permit. For the purpose of this section a residential unit includes each single-family detached unit, each single-family attached unit, and each multi-family unit. Said contributions shall be divided equally between the primary serving fire and rescue services. The County shall pay the collected proceeds to the primary serving fire company and the primary serving rescue company. In the event that a volunteer company is not the primary provider of fire and/or rescue service, the aforementioned contributions shall be discontinued on a basis of 50% for the primary fire service provider and 50% for the primary rescue service provider.
- Applicant shall provide all weather gravel compacted access for emergency vehicles to those portions of the project which are under construction, not later than the framing stage of construction, subject to approval of the Fire Marshal's office.

The Fire and Rescue Planning Staff is concerned that the re-alignment of Gum Springs Road could cause confusion and compromise timely response of emergency vehicles in that general vicinity. Staff will provide further comments after review of the second submission and their response to staff comments (especially comments from the Office of Transportation Services and VDOT). If you have any questions or need additional information, please contact me at 703-777-0333.

C: Project file

September 18, 2006

Ms. Maria Figueroa
Fire-Rescue Planner
Loudoun County Department of Fire & Rescue Services
16600 Courage Court
Leesburg, VA 20175

Subject: Contribution/Proffer Comments on:
Stone Ridge Commercial
ZMAP 2006-0011 & ZCPA 2006-0003

Dear Ms. Figueroa:

The subject application requests approval for rezoning to permit the construction of 307 multi-family detached units and 450,000 square feet of non-residential for commercial and retail purposes on approximately 73 acres of land. The project is within the primary fire and rescue service delivery area of the Arcola-Pleasant Valley Volunteer Fire Department (APVVFD).

The scope of this project will present a "moderate" fire risk and life safety exposure and place additional constraints on volunteer resources to protect the community. As the county grows, so does the rate of fire and EMS calls grow, adding additional burden to an already stretched volunteer system with limited financial and human resource support. In order for APVVFD to continue to remain solvent, and provide an acceptable level of service and protection to the communities we serve, the department is requiring the installation of automatic sprinklers in all residential properties within the response district.

The installation cost of residential sprinklers for new homes is approximately \$1.00 - \$1.50 per square foot. On average, this will typically add \$2500 - \$3500 to the cost of the home. This cost compares favorably when a homebuyer looks at the cost of upgrading carpeting, or installing a deck. In fact, such options usually cost more. The installation of residential sprinklers for new developments can omit the construction of additional fire stations, and the hiring of career personnel to augment volunteer staffing there-by lowering cost to the homeowner to absorb.

A193

Based on the Board of Supervisors decision to abolish annual proffers by Commercial and Homeowner's Associations in 2001, the APVVFD must act accordingly and submit the following for inclusion in any agreement between the County of Loudoun and the Applicant regarding fire and rescue/public safety voluntary contributions:

1. The applicant shall require all builders to provide and install a residential fire sprinkler system for each residential unit constructed; provided that the water supply system to any such residence has sufficient capacity to support the sprinkler system. All model homes utilized by the applicant and/or builder on the property for marketing purposes shall be constructed with a residential sprinkler system. All marketing information packets shall include promotional materials on the benefits of automatic fire sprinkler systems offered by the manufacturer of residential fire sprinkler systems, and United States Fire Administration. All sales agents must orientated to the benefits of residential sprinkler systems. All *Features* brochures shall include the residential sprinkler system and shall be printed in a fashion (i.e. double font size, italics, bold, etc.) to attract the buyer/reader's attention, as proof from the builder they are committed to providing a product with the safety and welfare of the purchaser in mind.
2. The applicant shall contribute an initial base sum of money of \$250.00 per unit for each residential unit, and an initial base sum of \$0.20 per gross square foot, per story of non-residential buildings, and shall escalate in accordance with the CPI beginning with the base year 1988. The initial contribution shall be payable to the County of Loudoun at the time of issuance of the zoning permit. For the purpose of this section a residential unit includes each single-family detached unit, each single-family attached unit, and each multi-family unit. Said contributions shall be divided equally between the primary serving fire and rescue services. The County shall pay the collected proceeds to the primary serving fire company and the primary serving rescue company. In the event that a volunteer company is not the primary provider of fire and/or rescue service, the aforementioned contributions shall be discontinued on a basis of 50% for the primary fire service provider and 50% for the primary rescue service provider.
3. Applicant shall provide all weather gravel compacted access for emergency vehicles to those portions of the project which are under construction, not later than the framing stage of construction, subject to approval of the Fire Marshall's office.
4. Access to alternative water sources or dry hydrants shall be provided to Loudoun County Fire and Rescue wherever impounded water is available on the site, in order to provide additional possible water sources for department use in the event of emergencies.

A194

Should the applicant disapprove with our request, the APVVFD will present our position at the next scheduled Planning Commission or Board Of Supervisors meeting for this project. The APVVFD is willing to take a reduction in contribution if the applicant is willing to ensure the installation of residential sprinkler protection for each residential unit proposed on the application.

The APVVFD will be receptive to reduce the amount of a one-time contribution of \$60.00 for each unit based on the CPI in paragraph number 2.

WE HEREBY REQUEST that our Department be afforded the opportunity to review and approve any revised documents related to fire and rescue contributions regarding this application. Should you have any further questions regarding our comments, please contact me at (703) 327-2222 day or (703) 406-3823 evening.

Sincerely,

Original Signed by Michael V. Kalasanckas

Michael V. Kalasanckas, Staff Assistant and Proffer Coordinator

cc: John Merrithew, Project Manager, Dept. of Planning
APVVFD File

MVK/mvk

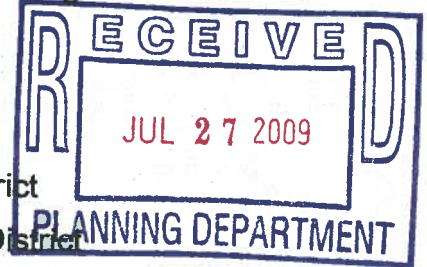
A195

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**COUNTY OF LOUDOUN
PARKS, RECREATION AND COMMUNITY SERVICES
REFERRAL MEMORANDUM**

To: Stephen Gardner, Project Manager, Planning Department (MSC #62)
From: ~~148~~ Brian G. Fuller, Park Planner, Facilities Planning and Development (MSC #78)
Through: ~~148~~ Mark A. Novak, Chief Park Planner, Facilities Planning and Development
CC: Diane Ryburn, Director
Steve Torpy, Assistant Director
Su Webb, Chairman, PROS Board, Catoclin District
Jean Ault, Vice Chairman, PROS Board, Dulles District
Robert C. Wright, PROS Board, Open Space Member
James E. O'Connor, PROS Board, Open Space Member
Date: July 24, 2009
Subject: Stone Ridge Commercial (3rd Submission)
ZMAP 2006-0011 & ZCPA 2006-0003
Election District: Dulles **Sub Planning Area:** Dulles and Upper Broad Run
MCPI #: 205-36-2224 (part), 204-47-0343, 204-35-8501, 204-46-2760 (part),
247-20-9549, 204-26-3927 (part) & 247-28-4151



BACKGROUND and ANALYSIS:

The Properties are located on the south side of Route 50 and west of Gum Springs Road (Route 659) in the Dulles District. The properties are currently zoned PD-H4, R-24, and PD-IP, are a combined approximately 77 acres, and are currently subject to the proffers and concept plan approved with ZMAP 1994-0017, ZMAP 2002-0013, and ZCPA 2002-0004. Overhead transmission lines and an underground gas transmission line run north to south adjacent to three of the properties.

The Applicant states the proposed application attempts to better balance the previously approved mix and location of employment and residential land uses within Stone Ridge. The applications propose no increase in the approved number of residential uses and a modest increase (approximately 2,400 sq. ft.) in the amount of non-residential floor area. The Applicant also proposes to add approximately 4 acres of land to the Stone Ridge planned community.

The application proposes to consolidate the previously approved residential units in Land Bays 5R and 6 on the east side of the power lines; to expand the PD-IP zoning district on the west side of the power lines; to redefine the limits for the PD-OP and R-24 zoning districts on the east side of the develop to accommodate the extension of South Point Boulevard to existing Gum Spring Road and ultimately to the West Spine Road; to proffer a time-certain delivery commitment of the previously proffered library space; and to proffer a dedication of land in the proposed PD-IP Land Bay 8 to the County for a public use site as a fire and/or rescue station.

The application also keeps Millstream Drive to intersect with Tall Cedars Drive, further west. The previous proposal to connect Millstream Drive to future Relocated Route 659 has been removed due to the environmental constraints associated with a crossing of the South Fork Broad Run. With this third submission, the Applicant has provided proffered commitments to a public trail easement along South Fork Broad Run and a monetary contribution to the improvement of Byrne's Ridge Park.

POLICY:

The site is governed under the land use policies in the Revised General Plan. A portion of the subject site is located within the Dulles Community of the Suburban Policy Area, and the rest is partially within the Upper Broad Run Subarea of the Transition Policy Area. The Planned Land Use Map adopted with the Revised General Plan designates the Suburban Policy Area planned uses of the property as residential. The portion of the site located within the Upper Broad Run Subarea of the Transition Policy Area is planned for residential uses in a cluster pattern.

Under the Revised General Plan, "Residential design features must include efficient and compact site and roadway layout with adequate open space (active, passive, and natural), streetscapes that include sidewalks, street trees, pedestrian-scale lighting, pedestrian and roadway linkages to other neighborhoods and communities, and the full protection and incorporation of the Green Infrastructure. Such neighborhoods will incorporate a mix of housing types and lot sizes to provide options for a range of lifestyles and incomes, as well as a mix of land uses to allow residents the opportunity to work and shop nearby."

"The Transition Policy Area seeks to create unique residential communities using conservation design techniques that fully implement Green Infrastructure policies and preserve substantial amounts of open space. The open space and Green Infrastructure elements provided in developments will link developments together and promote a transition in land development intensity between the Suburban and Rural Policy Areas. The primary development options offered in the Transition Policy Area include Villages and Residential Clusters."

A-198

COMMENTS:

The Department of Parks, Recreation and Community Services (PRCS) has reviewed the Applicant's responses dated June 16, 2009 to referral comments dated April 13, 2009, the revised proffer statement dated June 16, 2009, and the revised ZMAP/ZCPA Concept Plan dated June 2009. The following is a summary of the current status of comments 6, 7 and 8 identified by PRCS on April 13, 2008, as well as new Comment 9; all previously-resolved comments have been removed:

6. and 7. PRCS respects the Applicant's desire for the passive park in the TR-1 UBF land bay between Goshen Road and future Relocated Route 659 to remain an HOA amenity, much like the passive area in the existing Land Bay ZZ Open Space. Staff commends the Applicant for retaining and protecting the stream valley for passive parkland and open space. However, Staff requests more information concerning the proposed amenities within the passive HOA park, such as trails, etc. Furthermore, Staff requests that a public access easement be located along the South Fork Broad Run stream valley to facilitate a future, natural-surface trail to connect with other future public trail segments upstream and downstream. Staff will contact the Applicant to set up a meeting to further discuss the matter.

Applicant Response: *The Applicant has no plans to construct amenities within the HOA open space adjacent to the South Fork of Broad Run and intends to maintain it in its natural condition. However, the Applicant will proffer to grant the County a 10-foot wide public access easement within the stream valley within or adjacent to the existing sanitary sewer easement, subject to Loudoun Water approval, for a future County trail system. Please see Proffer III.B.4.*

Issue Status: PRCS appreciates the Applicant's willingness to proffer a public access easement for the purposes of a trail with the South Fork Broad Run Stream Valley. However, PRCS typically requests a minimum 30-foot trail easement to be provided at no cost to the County. PRCS is willing to partner with the Applicant and Loudoun Water in the location of the easement within a certain time period; however, Staff recommends that the Applicant revise Proffer III.B.4, to state, *"The Owner shall grant to the County a 30-foot wide public access easement within the South Fork of Broad Run stream valley for a future County trail coincident with or adjacent to the existing sanitary sewer easement at the time of Record Plat approval of the subject area. The Owner will coordinate the location of the public access easement with the Department of Parks, Recreation and Community Services and Loudoun Water, and will prepare and record the requisite deed and plat at no cost to the County."*

A199

8. Per approved ZMAP 1994-0017 and ZMAP 2002-0013, Stone Ridge Community Development, LLC provided an active County Park (Byrne's Ridge Park) with upgraded ballfields and parking. Stone Ridge also provided sewer and water line stubs to the park site. PRCS appreciates these previous facility upgrades, and Staff requests the opportunity to discuss with the Applicant potential options for providing a much-needed restroom facility at Byrne's Ridge Park.

Applicant Response: Staff may contact the Applicant at any time to discuss this matter.

Issue Status: PRCS has been in preliminary discussions with the Applicant concerning a potential restroom/concessions facility at Byrne's Ridge Park after the Applicant's presentation to County staff on April 2, 2009. PRCS is requesting the Applicant consider the opportunity to proffer this additional amenity or a monetary contribution for the future construction of this facility. PRCS can provide additional information concerning specifics of the facility in a future meeting and Staff will contact the Applicant to set up a meeting to further discuss the matter.

Applicant Response: The Applicant will contribute \$75,000 to the PRCS for improvements at Byrne's Ridge Park. Please see Proffer III.B.3.

Issue Status: PRCS appreciates the Applicant's generous contribution toward the addition of a concession stand and restrooms at Byrne's Ridge Park. However, Staff notes that proffers tied to permits in land bays are extremely difficult for the Department of Building & Development to track and verify. PRCS recommends that the Applicant revise Proffer III.B.3, Sentence 2, to state, "*The contribution shall be paid within 30 days of zoning application approval.*"

NEW COMMENT (July 24, 2009):

9. In conjunction with Zoning Administration's Proffer Review Comments 16 and 38, PRCS recommends that the Applicant revise Sheet 10 of the CDP to graphically delineate the proposed public stream valley trail easement, as well as its connection to the rest of the pedestrian network throughout the Stone Ridge community.

CONCLUSION:

Staff has identified the above, outstanding issues (specifically Comments 6, 7, and 9) that require additional information to complete the review of this Application.

A-200

If you have any questions or concerns regarding these comments, please do not hesitate to contact me personally via phone at 571-258-3251, or via e-mail at brian.fuller@loudoun.gov. You may also contact Mark Novak via phone at 703-737-8992, or via e-mail at mark.novak@loudoun.gov. I look forward to attending any meetings or work sessions to offer PRCS support, or to be notified of any further information regarding this project.


A-201

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**COUNTY OF LOUDOUN
PARKS, RECREATION AND COMMUNITY SERVICES
REFERRAL MEMORANDUM**

To: Stephen Gardner, Project Manager, Planning Department **(MSC #62)**

From:  Brian G. Fuller, Park Planner, Facilities Planning and Development
(MSC #78)

Through:  Mark A. Novak, Chief Park Planner, Facilities Planning and Development

CC: Diane Ryburn, Director

Steve Torpy, Assistant Director

Su Webb, Chairman, PROS Board, Catoctin District

Jean Ault, Vice Chairman, PROS Board, Dulles District

Robert C. Wright, PROS Board, Open Space Member

James E. O'Conner, PROS Board, Open Space Member

Date: April 13, 2009

Subject: **Stone Ridge Commercial
ZMAP 2006-0011 & ZCPA 2006-0003**

Election District: Dulles **Sub Planning Area:** Dulles and Upper Broad Run

MCPI #: 205-36-2224 (part), 204-47-0343, 204-35-8501, 204-46-2760 (part), 247-20-9549, 204-26-3927 (part) & 247-28-4151



BACKGROUND:

These applications were originally accepted for review on August 4, 2006. The transmittal of first referrals from the Planning Department was completed in December 2006. PRCS completed its referral on April 25, 2007. The Applicant submitted a substantially-revised application and response to the first submission comments on January 27, 2009. However, the Planning Director deemed the application be processed pursuant to Section 6-1205(A) of the Revised 1993 Zoning Ordinance, which necessitates a new first referral (60-day review), and reset the 365-day approval timeline. This referral will address the Applicant's responses to the initial referral review comments, as well as provide a substantial review of the revised submission.

The Properties are located on the south side of Route 50 and west of Gum Springs Road (Route 659) in the Dulles District. The properties are currently zoned PD-H4, R-24, and PD-IP, are a combined approximately 77 acres, and are currently subject to the proffers and concept plan approved with ZMAP 1994-0017, ZMAP 2002-0013, and ZCPA 2002-0004. Overhead transmission lines and an underground gas transmission line run north to south adjacent to three of the properties.

A203

POLICY:

The site is governed under the land use policies in the Revised General Plan. A portion of the subject site is located within the Dulles Community of the Suburban Policy Area, and the rest is partially within the Upper Broad Run Subarea of the Transition Policy Area. The Planned Land Use Map adopted with the Revised General Plan designates the Suburban Policy Area planned uses of the property as residential. The portion of the site located within the Upper Broad Run Subarea of the Transition Policy Area is planned for residential uses in a cluster pattern.

Under the Revised General Plan, "Residential design features must include efficient and compact site and roadway layout with adequate open space (active, passive, and natural), streetscapes that include sidewalks, street trees, pedestrian-scale lighting, pedestrian and roadway linkages to other neighborhoods and communities, and the full protection and incorporation of the Green Infrastructure. Such neighborhoods will incorporate a mix of housing types and lot sizes to provide options for a range of lifestyles and incomes, as well as a mix of land uses to allow residents the opportunity to work and shop nearby."

"The Transition Policy Area seeks to create unique residential communities using conservation design techniques that fully implement Green Infrastructure policies and preserve substantial amounts of open space. The open space and Green Infrastructure elements provided in developments will link developments together and promote a transition in land development intensity between the Suburban and Rural Policy Areas. The primary development options offered in the Transition Policy Area include Villages and Residential Clusters."

PROJECT ANALYSIS:

The Applicant states the proposed application attempts to better balance the previously approved mix and location of employment and residential land uses within Stone Ridge. The applications propose no increase in the approved number of residential uses and a modest increase (approximately 2,400 sq. ft.) in the amount of non-residential floor area.

The application proposes to consolidate the previously approved residential units in Land Bays 5R and 6 on the east side of the power lines; to expand the PD-IP zoning district on the west side of the power lines; to redefine the limits for the PD-OP and R-24 zoning districts on the east side of the develop to accommodate the extension of South Point Boulevard to existing Gum Spring Road and ultimately to the West Spine Road; to proffer a time-certain delivery commitment of the previously proffered library space; and to proffer a dedication of land in the proposed PD-IP Land Bay 8 to the County for a public use site as a fire and/or rescue station.

AZD4

The application also keeps Millstream Drive to intersect with Tall Cedars Drive, further west. The previous proposal to connect Millstream Drive to future Relocated Route 659 has been removed due to the environmental constraints associated with a crossing of the South Fork Broad Run.

COMMENTS:

With respect to Parks, Recreation and Community Services (PRCS) we offer the following comments and recommendations to the Applicant's responses to our initial comments provided on April 27, 2007:

1. No proffers were submitted with this application. Please provide proffers for review.

Applicant Response: *Draft proffers are provided with this submission.*

Issue Status: Resolved.

2. This project adds 307 multi-family units and offers no contribution to public recreation. The Dulles Area is presently experiencing, and will continue to experience significant residential development. Additional development from new rezoning and by-right developments will place recreational facilities in further jeopardy from a capacity perspective. Developers of other subarea residential projects indicate in their applications that the area is supported by existing and planned public facilities. However, residents from both by-right and rezoned subdivisions add a significant demand on existing recreation facilities which make it difficult to keep pace with respective service demands. This application alone will have an immediate impact on existing and planned public recreational facilities in the area.

The Applicant should demonstrate to Staff, the Planning Commission, and the Board of Supervisors how the recreational and leisure needs of these new residents will be met without further taxing the existing public recreational facilities in eastern Loudoun.

Applicant Response: *The Application has been revised to propose no increase in the number of previously-approved residential units for Stone Ridge. All residents of Stone Ridge have access to private recreational amenities.*

Issue Status: Resolved, due to the removal of the previous request for additional residential units.

A205

3. The Revised General Plan currently states in Chapter 3: Fiscal Planning and Public Facilities, General Public Facilities Policies, #8, page 3-9: "The County encourages the co-location of County facilities where they are feasible and can function effectively as multi-purpose community facilities (e.g. community meeting space, shared parking, athletic fields, and integrated design)."

The Fiscal Impact Committee (FIC) has re-endorsed the current Revised General Plan policy as contained in Chapter 3, and is currently looking at public/private opportunities for co-location of public/private facilities. Commercial, office and industrial developments based on their zoning are potential areas where facilities such as athletic fields (lighted) could be co-located. The opportunity for shared parking and access to existing utilities (water, sewer and electricity) could provide additional cost savings. Commercial/retail developments may also benefit from increased pedestrian and vehicular traffic from patrons of active recreational facilities.

Applicant Response: *Stone Ridge has previously dedicated the County's 25-acre Byrne's Ridge Park on Stone Springs Boulevard, as well as the Mercer Middle School and Arcola Elementary School sites, all of which have several athletic fields.*

Issue Status: Resolved. PRCS appreciates the Applicant's previous contributions to active athletic recreation facilities.

4. The Loudoun County Bicycle and Pedestrian Mobility Master Plan (BPMMP), Chapter 4(A), Roadway Planning and Design Policy, Walkway and Sidewalk Policy 2(a); "*Sidewalks in the Suburban Policy Area: Residential streets should have sidewalks with a **minimum width of five (5') feet**.* PRCS recommends that all internal sidewalks be a minimum of 5 feet. It is important to recognize that providing a wider width for sidewalks does not necessarily add to the safety of sidewalk bicycle travel. Utilizing or providing a sidewalk as a shared use path is unsatisfactory. Sidewalks are typically designed for pedestrian speeds and maneuverability and are not compatible with for higher speed bicycle use.

Applicant Response: *Comment acknowledged.*

Issue Status: Resolved.

5. The Loudoun County Bicycle and Pedestrian Mobility Master Plan (BPMMP), Chapter 4(B), Land Development, Land Development Policy 6, states that "*All land development applications shall provide bicycle and pedestrian access through the development in various directions, so as to prevent it from becoming*

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a barrier between other trip origins and destinations in the community." In addition, BPMMP Land Development Policy 7, "All land development applications shall provide a sufficient number of bicycle and pedestrian access points to ensure efficient connections to and from the various activity nodes within the development and linkages to existing or future adjacent developments."

On Sheet 8 of the Concept Plan, the Applicant is proposing an extension of the trail system throughout the Stone Ridge community. PRCS requests the Applicant to provide a typical section, including width and surface type, of each of the types of trails proposed, and their locations. PRCS recommends that the trail proposed along Tall Cedars Parkway be a 10-foot wide, paved shared bicycle/pedestrian trail, and that the trail along the South Fork Board Run be a natural pedestrian only trail.

Applicant Response: *The width and surface type of the proposed trails will be consistent with FSM requirements and will be determined at the time of site development to be consistent with the existing trail network within Stone Ridge.*

Issue Status: Resolved.

6. In addition to Comment 5, PRCS is developing a system of interconnected linear parks along the County's Stream Valley Corridors. This is consistent with the Greenways and Trail Policies of the Revised General Plan, Policy 1 (p. 5-39): "Greenways include areas along rivers and streams that are often ideal for trails". Policy 4 (p. 5-40): "The County will seek through purchase, proffer, density transfer, donation or open-space easement, the preservation of greenways and the development of trails". Parks, Recreation and Community Services Policies, Policy 3 (p. 3-15): "The County encourages the contiguous development of regional linear parks, trail, and natural open space corridors to provide pedestrian links and preserve environmental and aesthetic resources".

Applicant Response: *Staff may contact the Applicant at any time to discuss this matter. It has been the Applicant's intent to retain the passive park in the TR-1 UBF land bay as an HOA amenity.*

Issue Status: PRCS respects the Applicant's desire for the passive park in the TR-1 UBF land bay between Goshen Road and future Relocated Route 659 to remain an HOA amenity, much like the passive area in the existing Land Bay ZZ Open Space. Staff commends the Applicant for retaining and protecting the stream valley for passive parkland and open space. However, Staff requests more information concerning the proposed amenities within the passive HOA park, such as trails, etc. Furthermore,

A207

Staff requests that a public access easement be located along the South Fork Broad Run stream valley to facilitate a future, natural-surface trail to connect with other future public trail segments upstream and downstream. Staff will contact the Applicant to set up a meeting to further discuss the matter.

7. PRCS would like to discuss with the Applicant a potential opportunity for dedication of the South Fork Broad Run flood plain to the County as a linear stream valley park. PRCS has been developing a system of linear stream valley parks along stream corridors within Loudoun County. Staff views these as important linkages for passive public access in promoting educational awareness of river and stream ecosystems, wildlife habitat, cultural heritage and connectivity to other public facilities. Staff is currently coordinating with other proposed area project applicants on both sides of the South Fork Broad Run for a potential contiguous linear stream valley park.

Applicant Response: *Staff may contact the Applicant at any time to discuss this matter. It has been the Applicant's intent to retain the passive park in the TR-1 UBF land bay as an HOA amenity.*

Issue Status: PRCS respects the Applicant's desire for the passive park in the TR-1 UBF land bay between Goshen Road and future Relocated Route 659 to remain an HOA amenity, much like the passive area in the existing Land Bay ZZ Open Space. Staff commends the Applicant for retaining and protecting the stream valley for passive parkland and open space. However, Staff requests more information concerning the proposed amenities within the passive HOA park, such as trails, etc. Furthermore, Staff requests that a public access easement be located along the South Fork Broad Run stream valley to facilitate a future, natural-surface trail to connect with other future public trail segments upstream and downstream. Staff will contact the Applicant to set up a meeting to further discuss the matter.

8. Per approved ZMAP 1994-0017 and ZMAP 2002-0013, Stone Ridge Community Development, LLC provided an active County Park (Byrne's Ridge Park) with upgraded ballfields and parking. Stone Ridge also provided sewer and water line stubs to the park site. PRCS appreciates these previous facility upgrades, and Staff requests the opportunity to discuss with the Applicant potential options for providing a much-needed restroom facility at Byrne's Ridge Park.

Applicant Response: *Staff may contact the Applicant at any time to discuss this matter.*

A 2008

Issue Status: PRCS has been in preliminary discussions with the Applicant concerning a potential restroom/concessions facility at Byrne's Ridge Park after the Applicant's presentation to County staff on April 2, 2009. PRCS is requesting the Applicant consider the opportunity to proffer this additional amenity or a monetary contribution for the future construction of this facility. PRCS can provide additional information concerning specifics of the facility in a future meeting and Staff will contact the Applicant to set up a meeting to further discuss the matter.

CONCLUSION:

PRCS has identified the issues 6, 7, and 8 above, in which Staff requests the opportunity to discuss further options and/or contributions with the Applicant. Staff will contact the Applicant to set up a meeting to further discuss these issues.

If you have any questions or concerns regarding these comments, please do not hesitate to contact me personally via phone at 571-258-3251, or via e-mail at brian.fuller@loudoun.gov. You may also contact Mark Novak via phone at 703-737-8992, or via e-mail at mark.novak@loudoun.gov. I look forward to attending any meetings or work sessions to offer PRCS support, or to be notified of any further information regarding this project.

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**COUNTY OF LOUDOUN
PARKS, RECREATION AND COMMUNITY SERVICES
REFERRAL MEMORANDUM**

To: Stephen Gardner, Project Manager, Planning Department (MSC #62)
From: *ASF* Brian G. Fuller, Park Planner, Facilities Planning and Development (MSC #78)
Through: *ASF* Mark A. Novak, Chief Park Planner, Facilities Planning and Development
CC: Diane Ryburn, Director
Steve Torpy, Assistant Director
Su Webb, Park Board, Chairman
Jim Bonfils, Park Board, Dulles District



Date: April 25, 2007

Subject: ZMAP 2006-0011 and ZCPA 2006-0003 **Stone Ridge Commercial**
Election District: Dulles **Sub Planning Area:** Dulles and Upper Broad Run
MCPI #: 205-36-2224 (part), 204-35-8501 (part), 204-26-3927, 204-39-4010, 204-39-4010, 204-39-3236, 204-40-4123 (part)

BACKGROUND:

The Properties are located on the south side of Route 50 and west of Gum Springs Road (Route 659) in the Dulles District. The properties are currently zoned CLI, PD-OP, PD-IP, and R-24, are a combined approximately 73.51 acres, and are subject to the proffers and concept plan approved with ZMAP 1994-0017, ZMAP 2002-0013, and ZCPA 2002-0004. Overhead transmission lines and an underground gas transmission line run north to south adjacent to three of the properties. The Applicant is proposing to add approximately 4 acres of land to the Stone Ridge planned community.

The ZMAP/ZCPA request will increase the existing PD-OP floor area from approximately 165,000 sq. ft. to approximately 592,000 sq. ft., will decrease the existing PD-IP floor area from approximately 570,000 sq. ft. to approximately 146,000 sq. ft., and will add an additional 307 multi-family units above current Stone Ridge approvals. To support this program, the Applicant seeks to rezone portions of the Properties as CLI, PD-OP, PD-IP R-16, and R-24 in accordance with the Revised 1993 Zoning Ordinance.

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The Applicant also proposes to amend the ZMAP 2002-0013 concept plan and proffers to reflect the changes in land uses proposed by the Rezoning Application, to modify the permitted FAR within PD-IP Land Bay 7.

POLICY:

The site is governed under the land use policies in the Revised General Plan. A portion of the subject site is located within the Dulles Community of the Suburban Policy Area, and the rest is partially within the Upper Broad Run Subarea of the Transition Policy Area. The Planned Land Use Map adopted with the Revised General Plan designates the Suburban Policy Area planned uses of the property as residential. The portion of the site located within the Upper Broad Run Subarea of the Transition Policy Area is planned for residential uses in a cluster pattern.

Under the Revised General Plan, "Residential design features must include efficient and compact site and roadway layout with adequate open space (active, passive, and natural), streetscapes that include sidewalks, street trees, pedestrian-scale lighting, pedestrian and roadway linkages to other neighborhoods and communities, and the full protection and incorporation of the Green Infrastructure. Such neighborhoods will incorporate a mix of housing types and lot sizes to provide options for a range of lifestyles and incomes, as well as a mix of land uses to allow residents the opportunity to work and shop nearby."

"The Transition Policy Area seeks to create unique residential communities using conservation design techniques that fully implement Green Infrastructure policies and preserve substantial amounts of open space. The open space and Green Infrastructure elements provided in developments will link developments together and promote a transition in land development intensity between the Suburban and Rural Policy Areas. The primary development options offered in the Transition Policy Area include Villages and Residential Clusters."

PROJECT ANALYSIS:

The Applicant states the proposed rezoning provide additional areas the development of by-right office uses in Stone Ridge that will increase local employment opportunities and better balance the mix of employment and residential uses within the community. The rezoning will also provide a multi-family land bay on the north side of Tall Cedars Parkway that will provide additional areas for office space, as well as completing a corridor of compatible residential uses along Tall Cedars Parkway.

The expansion of the PD-OP district in the northeast corner of Stone Ridge will provide a continuous office land bay on the south side of Route 50 between Stone Springs Boulevard and Gum Spring Road that will mirror the proposed PD-OP across Route 50 in the Glascock Field at Stone Ridge property. In addition, on the western side of the

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community, the existing section of Millstream Drive that extends southward to Tall Cedars Parkway will be abandoned, and realigned to extend west and connect with Relocated Route 659.

COMMENTS:

With respect to Parks, Recreation and Community Services (PRCS) we offer the following comments and recommendations:

1. No proffers were submitted with this application. Please provide proffers for review.
2. This project adds 307 multi-family units and offers no contribution to public recreation. The Dulles Area is presently experiencing, and will continue to experience significant residential development. Additional development from new rezoning and by-right developments will place recreational facilities in further jeopardy from a capacity perspective. Developers of other subarea residential projects indicate in their applications that the area is supported by existing and planned public facilities. However, residents from both by-right and rezoned subdivisions add a significant demand on existing recreation facilities which make it difficult to keep pace with respective service demands. This application alone will have an immediate impact on existing and planned public recreational facilities in the area.

The Applicant should demonstrate to Staff, the Planning Commission, and the Board of Supervisors how the recreational and leisure needs of these new residents will be met without further taxing the existing public recreational facilities in eastern Loudoun.

3. The Revised General Plan currently states in Chapter 3: Fiscal Planning and Public Facilities, General Public Facilities Policies, #8, page 3-9: "The County encourages the co-location of County facilities where they are feasible and can function effectively as multi-purpose community facilities (e.g. community meeting space, shared parking, athletic fields, and integrated design)."

The Fiscal Impact Committee (FIC) has re-endorsed the current Revised General Plan policy as contained in Chapter 3, and is currently looking at public/private opportunities for co-location of public/private facilities. Commercial, office and industrial developments based on their zoning are potential areas where facilities such as athletic fields (lighted) could be co-located. The opportunity for shared parking and access to existing utilities (water, sewer and electricity) could provide additional cost savings.

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Commercial/retail developments may also benefit from increased pedestrian and vehicular traffic from patrons of active recreational facilities.

4. The Loudoun County Bicycle and Pedestrian Mobility Master Plan (BPMMP), Chapter 4(A), Roadway Planning and Design Policy, Walkway and Sidewalk Policy 2(a); *"Sidewalks in the Suburban Policy Area: Residential streets should have sidewalks with a **minimum width of five (5') feet**. PRCS recommends that all internal sidewalks be a minimum of 5 feet. It is important to recognize that providing a wider width for sidewalks does not necessarily add to the safety of sidewalk bicycle travel. Utilizing or providing a sidewalk as a shared use path is unsatisfactory. Sidewalks are typically designed for pedestrian speeds and maneuverability and are not compatible with for higher speed bicycle use.*
5. The Loudoun County Bicycle and Pedestrian Mobility Master Plan (BPMMP), Chapter 4(B), Land Development, Land Development Policy 6, states that *"All land development applications shall provide bicycle and pedestrian access through the development in various directions, so as to prevent it from becoming a barrier between other trip origins and destinations in the community." In addition, BPMMP Land Development Policy 7, "All land development applications shall provide a sufficient number of bicycle and pedestrian access points to ensure efficient connections to and from the various activity nodes within the development and linkages to existing or future adjacent developments."*

On Sheet 8 of the Concept Plan, the Applicant is proposing an extension of the trail system throughout the Stone Ridge community. PRCS requests the Applicant to provide a typical section, including width and surface type, of each of the types of trails proposed, and their locations. PRCS recommends that the trail proposed along Tall Cedars Parkway be a 10-foot wide, paved shared bicycle/pedestrian trail, and that the trail along the South Fork Board Run be a natural pedestrian only trail.

6. In addition to Comment 5, PRCS is developing a system of interconnected linear parks along the County's Stream Valley Corridors. This is consistent with the Greenways and Trail Policies of the Revised General Plan, Policy 1 (p. 5-39): *"Greenways include areas along rivers and streams that are often ideal for trails".* Policy 4 (p. 5-40): *"The County will seek through purchase, proffer, density transfer, donation or open-space easement, the preservation of greenways and the development of trails".* Parks, Recreation and Community Services Policies, Policy 3 (p. 3-15): *"The County encourages the contiguous development of regional linear parks, trail, and natural open space corridors to provide pedestrian links and preserve environmental and aesthetic resources".*

A214

7. PRCS would like to discuss with the Applicant a potential opportunity for dedication of the South Fork Broad Run flood plain to the County as a linear stream valley park. PRCS has been developing a system of linear stream valley parks along stream corridors within Loudoun County. Staff views these as important linkages for passive public access in promoting educational awareness of river and stream ecosystems, wildlife habitat, cultural heritage and connectivity to other public facilities. Staff is currently coordinating with other proposed area project applicants on both sides of the South Fork Broad Run for a potential contiguous linear stream valley park.
8. Per approved ZMAP 1994-0017 and ZMAP 2002-0013, Stone Ridge Community Development, LLC provided an active County Park (Byrne's Ridge Park) with upgraded ballfields and parking. Stone Ridge also provided sewer and water line stubs to the park site. PRCS appreciates these previous facility upgrades, and Staff requests the opportunity to discuss with the Applicant potential options for providing a much-needed restroom facility at Byrne's Ridge Park.

CONCLUSION:

PRCS has identified above, outstanding issues that require additional information to complete the review of this application.

If you have any questions or concerns regarding these comments, please do not hesitate to contact me personally via phone at 571-258-3251, or via e-mail at brian.fuller@loudoun.gov. You may also contact Mark Novak via phone at 703-737-8992, or via e-mail at mark.novak@loudoun.gov. I look forward to attending any meetings or work sessions to offer PRCS support, or to be notified of any further information regarding this project.

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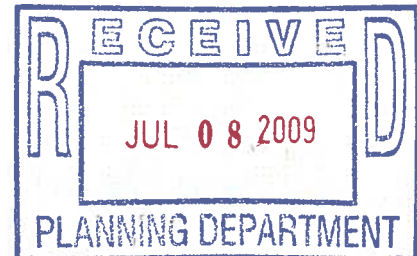


LOUDOUN COUNTY PUBLIC SCHOOLS
PLANNING AND LEGISLATIVE SERVICES

21000 Education Court
Ashburn, Virginia 20148
Telephone: 571-252-1050
Facsimile: 571-252-1101

July 6, 2009

Mr. Stephen Gardner
County of Loudoun
Department of Planning
1 Harrison Street, SE
Leesburg, Virginia 20175



RE: ZMAP 2006-0011 & ZCPA 2006-0003/Stone Ridge Commercial (3rd Referral Request)

Dear Mr. Gardner:

School Board staff has reviewed the third submission for the Stone Ridge Commercial zoning map and zoning concept plan amendment and offers no further comment.

The applicant's commitment to constructing a pedestrian system that connects the residential areas of the Stone Ridge development with both Arcola Elementary School and Mercer Middle Schools is noted and appreciated.

Should you require additional information, please contact me at your earliest convenience.

Sincerely,

Sam Adamo
Executive Director

c: Edgar B. Hatrick, Division Superintendent
Loudoun County School Board
(Site Location: Dulles Election District)

ATTACHMENT 1;

A217

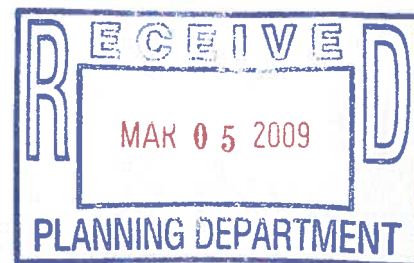
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LOUDOUN COUNTY PUBLIC SCHOOLS
PLANNING AND LEGISLATIVE SERVICES

21000 Education Court
Ashburn, Virginia 20148
Telephone: 571-252-1050
Facsimile: 571-252-1101

March 4, 2009



Mr. Stephen Gardner
County of Loudoun
Department of Building & Development
1 Harrison Street, SE (Mail Stop #62)
Leesburg, Virginia 20175

RE: ZMAP 2006-0011 & ZCPA 2006-0003/Stone Ridge Commercial (Amended Application)

Dear Mr. Gardner:

School Board staff has reviewed the revised zoning map and zoning concept plan amendment application for Stone Ridge Commercial. As no additional residential units are proposed with the revised application, staff is not providing a project assessment outlining the impact of the project on Loudoun County Public Schools. Staff will note that the Stone Ridge developer has provided land for Mercer Middle School (opened Fall 2004) and the new Arcola Elementary School (opened Fall 2007).

Safe walking paths remain an important concern for the School Board, staff, and parents of the children who attend our schools. The lack of safe walking paths for students within subdivisions creates a growing safety hazard and will increase operational costs. In rural areas of Loudoun, each house becomes a bus stop. Similar circumstances are emerging in the county's new subdivisions. Students that live within a school's walk zone must be transported to school because there are either no sidewalks or sidewalks are only constructed on one side of the street. Should new subdivisions provide sidewalks on both sides of the street, children could safely walk to a bus stop or school. Sidewalks not only increase operational efficiency but ultimately mean less time on the school bus for Loudoun's children. In order to ensure that students residing within Stone Ridge can safely walk to and from school and/or school bus stop locations, pedestrian walkways should be provided and allow for public access easements.

Should you require any further information, please contact me at your earliest convenience.

Sincerely,

Sam Adamo, Director

c: Edgar B. Hatrick, Division Superintendent
Loudoun County School Board
(Site Location: Dulles Election District)

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Loudoun County Health Department

P.O. Box 7000
Leesburg VA 20177-7000



Environmental Health
Phone: 703 / 777-0234
Fax: 703 / 771-5023

Community Health
Phone: 703 / 777-0236
Fax: 703 / 771-5393

February 13, 2009

MEMORANDUM TO: Stephen Gardner, Project Manager MSC # 62
Planning Department, Building & Development

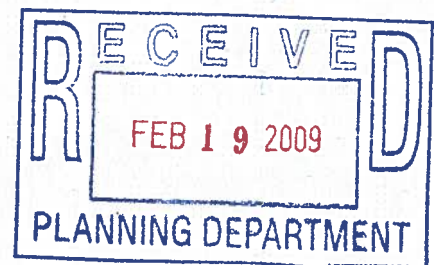
FROM: John P. Dayton MSC #68
Sr. Env. Health Specialist
Division Of Environmental Health

SUBJECT: ZMAP-2006-0011 & ZCPA 2006-0003
Stone Ridge Commercial
Multiple Parcels

This Department reviewed the package provided to this office and the plat prepared by Urban dated **January 2009**, and has no comments to the proposal.

If further information or clarification on the above project is required, please contact John Dayton at 737-8848.

JPD/JEL/jpd



ATTACHMENT 1^k

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A22.



Environmental Health
Phone: 703 / 777-0234
Fax: 703 / 771-5023

Loudoun County Health Department


P.O. Box 7000
Leesburg VA 20177-7000



Community Health
Phone: 703 / 777-0236
Fax: 703 / 771-5393

September 28, 2006

MEMORANDUM TO: John Merrithew, Project Manager MSC # 62
Planning Department, Building & Development

FROM: John P. Dayton MSC #68
Sr. Env. Health Specialist
Division Of Environmental Health 

SUBJECT: **ZMAP 2006-0011, Stone Ridge Commercial
Multiple Parcels**

This Department reviewed the submission and plats by Urban Engineering, and recommends approval with the following comments/conditions to the proposal.

- 1) All the proposed lots and structures are properly served by public water and public sewer.
- 2) All existing wells and drainfields are shown on future plats.
- 3) All existing wells and drainfields are properly abandoned (Health Department permit required) prior to submission of record plat or razing of the structure, which ever is first.

If further information or clarification on the above project is required, please contact John Dayton at 737-8848.

JPD/JEL/jpd



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A224



880 Harrison Street, SE • P.O. Box 4000 • Leesburg, Virginia 20177-1403 • www.lcsa.org

November 21, 2006

Mr. John Merrithew
Department of Planning
1 Harrison Street, S.E.
P. O. Box 7000
Leesburg, Virginia 20177-7000

Re: **ZMAP-2006-0011 and ZCPA-2006-0003, Stone Ridge Commercial**

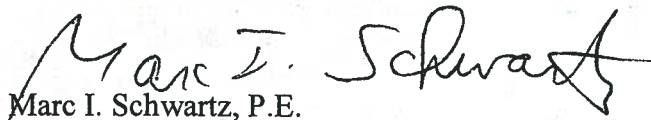
Dear Mr. Merrithew:

The Sanitation Authority has reviewed the referenced Zoning Map Amendment Petition and Zoning Concept Plan Amendment for Stone Ridge Commercial and offers no objection to their approval.

Public water and sanitary sewer service would be contingent upon the developer's compliance with the Authority's Statement of Policy; Rates, Rules and Regulations; and Design Standards. Detailed comments on the design of the public water and sanitary sewer facilities will be addressed during the Sanitation Authority's Utility Extension Request process.

Should you have any questions, please do not hesitate to contact Susan Bour, of this office.

Sincerely


Marc I. Schwartz, P.E.
Manager, Department of Land
Development Programs



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**COUNTY OF LOUDOUN
PROFFER MATRIX TEAM**

MEMORANDUM

DATE: July 8, 2009

TO: Stephen Gardner, Project Manager

FROM: Proffer Referral Team

THROUGH: Daniel Csizmar, Capital Facilities Planner

SUBJECT: **Proffer Referral Comments
(ZMAP-2006-0011, Stone Ridge Commercial)**

This memorandum is in response to your request for 3rd referral comments regarding the revised proffer statement submitted for ZMAP-2006-0011, Stone Ridge Commercial. This referral represents the combined comments of all County Departments with capital facility planning responsibilities.

[Proffer II.B.6] Staff recommends that an additional trigger be included to provide for the realignment and construction of Millstream Drive westward and southward to Tall Cedars Parkway as depicted on the CDP. The construction of the realigned segment of Millstream Drive southward to Tall Cedars Parkway is triggered only upon request by the County, and is promised to be constructed and open for use no later than 18 months after initial request of construction by the County. The eventual development and use of Land Bay 8 is also dependent upon the construction of Millstream Drive to Tall Cedars Parkway. Staff recommends that an option exist for the construction of Millstream Drive southward to Tall Cedars Parkway independent of the County's request, so that the construction of this road segment can also occur to provide access to Land Bay 8 in the event this land bay will be developed prior to the County developing the 5.60 acre Public Use Site. The construction of re-aligned Millstream Drive should occur either upon request of the County, or at another development benchmark, whichever occurs first. Please consult with the Office of Transportation Services regarding the appropriate phasing and construction of realigned Millstream Drive.

[Proffer III.G] Please revise the proffer statement to stipulate that all permanent water and sewer, and underground telephone, electric, gas, cable, broadband and telecommunication lines will be provided to the proffered Public Use Site, at no cost to the County, prior to dedication of the site to the County. To ensure all public water and sewer are being provided to the site at no cost to the County, staff requests that the Applicant pay for all tap fees and hookup charge backs to access the public water and sewer systems at the Public Use Site. The proffer statement also needs to stipulate that the proffered Public Use Site will be excluded from the Owner's Association.

[Proffer III.G.4] Please revise the first sentence of this proffer to provide that the conveyance of

Public Use Site #4 to the County will be 2.9012 acres zoned PD-CC-SC as shown on Sheet 5 of the CDP. The proffer statement currently states that Public Use Site #4 is zoned PD-IP, but the requested rezoning of this site is to the PD-CC-SC zoning district.

Please clarify in Proffer III.G.4.a whether the amenities to be provided in the proffered Commuter Parking Lot will include bicycle racks.

[Proffer VI.B.1] Please clarify whether or not the Applicant is requesting to receive a credit on their open space contributions to complete all new trail segments as depicted on the CDP. It is not clear to staff if the Applicant is requesting credits on open space contributions for specific trail segments, or for all trail segments depicted on the CDP that currently are not constructed.

[Proffer VI.B.2] Please revise the last sentence of this proffer to provide "Such contributions shall escalate each year in accordance with increases in the Consumer Price Index, and shall be utilized to defray the costs of acquiring and/or improving County Parks in the Dulles Planning Subarea."

If you have any questions concerning this correspondence, please call me at (703) 771-5997.

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**COUNTY OF LOUDOUN
PROFFER MATRIX TEAM**

MEMORANDUM

DATE: April 7, 2009

TO: Stephen Gardner, Project Manager

FROM: Proffer Referral Team

THROUGH: Daniel Csizmar, Capital Facilities Planner

SUBJECT: **Proffer Referral Comments
(ZMAP-2006-0011, Stone Ridge Commercial)**

This memorandum is in response to your request for comments regarding the revised proffer statement submitted for ZMAP-2006-0011, Stone Ridge Commercial. This referral represents the combined comments of all County Departments with capital facility planning responsibilities.

[Proffer I.C.1.a] The proffer statement references Land Bay EE2B, but the Concept Development Plan (CDP) does not label any portion of Land Bay EE2 as "Land Bay EE2B". Please make sure the CDP labels Land Bay EE2A and Land Bay EE2B.

[Proffer I.E.b and Proffer III.F] Please note, the County's Capital Facility Standard for Fire & Rescue Stations is 5 acres. The proffered Public Use Site in Land Bay 8 is approximately 3.37 acres. The proffered site does not meet the County's capital facility standards for a Fire & Rescue Station; therefore, the Applicant is not eligible to receive a capital facility credit for the proffered site. Please revise these sections of the proffer statement to eliminate the capital facilities credit for the Public Use Site in Land Bay 8.

[Proffer II.B] In the 2nd to last sentence of the 2nd paragraph under the title "Right-Of-Way Dedication and Construction", please revise the proffer statement to state, "With regard to phasing, all Phase I and Phase II road improvements set forth in attached Exhibit B, entitled "Stone Ridge Phasing Plan", shall be constructed or bonded for construction prior to the issuance of any zoning permits for the residential units in Land Bays 1, 2, 3, 4 or 5."

[Proffer III.C] Please revise the 2nd sentence of proffer III.C, "Library Site", to state, "Such library space shall be located on the first two floors (approximately 20,000 square feet per floor with separate first floor entrance for entry control and security purposes) of a four-story office building to be constructed on Land Bay FF2A."

Typically, all County-owned facilities and public use sites proffered to the County are excluded from any Owner's Associations. In this case, the County is being proffered a portion of an office building proposed to be within an office condominium. Please consult with the Office of the

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County Attorney to review the Condominium Association documents and agree to their provisions prior to the approval of this zoning amendment application.

[Proffer III.G] Please revise the proffer statement to provide that "The Owner shall convey to Loudoun County Land Bay 8, shown on Sheet 4 of the CDP, within 60 days of the County's request for conveyance of the Public Use Site. The County may request conveyance of the Public Use Site immediately upon approval of ZMAP-2006-0011."

The County requires flexibility in the future use of the Public Use Site. The County is not in favor of accepting a site where its ability to use the site is limited or restricted. Please revise the proffer statement to state the Applicant's preference for the Public Use Site to be developed by the County as a Fire & Rescue Station. The ultimate use of the Public Use Site is at the discretion of the County. The proffer statement should not state what the site will be developed as, but rather, the Applicant's preference for development of the Public Use Site by the County.

Please note that the required acreage for a Fire and Rescue Station site is five (5) acres. The proposed proffered site of 3.37 acres does not meet the County's capital facility standard for Fire & Rescue Stations. The site contains a small area of moderately steep slopes as well as both floodplain and wetlands. As a result, the useable acreage has been reduced to approximately 2.5 acres once all setbacks and environmental constraints are established. The southern constraints along the frontage of Tall Cedars Parkway include a 14' trail easement, 35' parking setback and a 75' building setback. The western constraints include the floodplain and its associated 50' management buffer. The northern boundary line is hindered by the mapped wetlands while the eastern boundary requires a 25' parking and building setback. The property slopes toward the northwest at an average rate of 5-7% for approximately 230 feet prior to a steeper slope toward the designated wetlands. These physical constraints limit the County's ability to develop the site as a Fire & Rescue Station.

Please revise the proffer statement to address the following concerns regarding the Public Use Site:

1. The timeframe in which Millstream Drive would be relocated.
2. The ultimate elevation of Millstream at the proposed entrance to the facility for evaluation of grading impacts. Site development may require a minor retaining wall along the northern slope.
3. The current layout accounts for a site elevation delta of approximately 12'. The current layout would require approximately 6' of cut adjacent to Tall Cedars with 6' of fill along the northern side adjacent to the wetlands.
4. Final storm water management requirements required for the site and any impacts that relocated Millstream would have on drainage.
5. Due to the extensive forest cover, buffering requirements should be minimal so long as selective clearing is imposed.
6. The site will most likely accommodate only one entrance onto Millstream which would have to be shared by Fire and Rescue operations as well as the public.

The proffer statement needs to stipulate that all permanent water and sewer, and underground

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telephone, electric, gas, cable, broadband and telecommunication lines will be provided to the proffered Public Use Site, at no cost to the County, prior to dedication of the site to the County. To ensure all public water and sewer are being provided to the site at no cost to the County, Staff requests that the Applicant pay for all tap fees and hookup charge backs to access the public water and sewer systems at the Public Use Site.

Please note, that the County requests that the Applicant not use the proffered public use site for staging, dumping, or other activities prior to conveyance of the site to the County. The County intends to receive dedication of the site upon approval of the rezoning application and would request that the Applicant not disturb the property until conveyance is finalized. No activity should take place on the proffered Public Use Site prior to dedication to the County. The County needs to ensure that no dumping, stockpiling of construction debris or other harmful materials is occurring on the site prior to conveyance.

The proffer statement needs to stipulate that the proffered Public Use Site will be excluded from the Owner's Association.

The Applicant's proffered site will be evaluated for suitability by the County against Loudoun County's Usable Land Criteria for Public Use Sites, and must meet these Criteria. The Criteria are available upon request from the County's Office of Capital Construction. The usable acreage must be exclusive of the encumbrances and conditions listed in the Criteria. The Applicant shall prepare and issue a report that demonstrates that the proposed site meets each of the Criteria.

[Park & Ride Lot] Please note, the County's Capital Improvements Program (CIP) calls for the expansion of the current Park & Ride Lot at Stone Ridge in the FY 09-14 timeframe. The expansion project calls for the County to "Acquire a minimum of 2.5 buildable acres to expand the capacity of the 250-space proffered lot at Stone Ridge. It is initially assumed that 100 additional spaces will be constructed. This expansion would increase park-and-ride capacity for citizens in Stone Ridge and along the Route 50 corridor."

From the County's perspective, the ideal location for the expansion of the Stone Ridge Park and Ride Lot is directly across Millstream Drive from the current Park and Ride Lot in Land Bay EE2. This location would allow for the expansion of the current lot, without having to add additional stops for the commuter busses to make within the Stone Ridge development. The County requests that the Applicant consider proffering an additional 100 parking spaces in the immediate vicinity of the current Park and Ride Lot to accommodate additional patrons of the Commuter Bus Service.

The design of park-and-ride lots is to be consistent with the County's goal for a high-quality, pedestrian-friendly, and environmentally-sensitive setting. Park and ride lots are to be located near major arterial and collector roads. Lots will be linked to surrounding neighborhoods by sidewalks and bicycle facilities. Adequate lighting provides for the safety of commuters and landscaping ensures attractiveness and environmental sensitivity.

Park-and ride lots in the towns and the Suburban Policy Area will be located along or at the

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intersection of arterial or major collector roads, near activity centers such as commercial or mixed-use centers, schools, or other destinations, at transit stops, or in other safe and secure locations that provide convenient access. They should be connected by sidewalks or shared pathways to enable carpoolers and pedestrians to walk to the lot. These park-and-ride lots should receive priority consideration for the installation of bicycle lockers and racks.

The general location of the facility is to be depicted on the CDP, and the Proffer Statement must indicate that the location of the proposed Park & Ride facility will be reviewed and accepted by County Staff prior to Site Plan approval. If the facility is not dedicated to the County, the County requests that the Applicant provide public access easements on the Park & Ride facility. Language should be included related to the ongoing maintenance of the lot to include lighting, bus shelter maintenance, asphalt/pavement, pavement markings, and snow removal.

The applicant may claim a credit towards their regional transportation contribution for constructing the park & ride facility. If the applicant uses funds associated with another proffered cash contribution towards the construction of the facility, the applicant must subtract the amount of the outside proffered funds used from their regional transportation contribution credit.

[HOA] Please stipulate that all sidewalks and trails, other than those located on the Public Use Site, will be maintained by the Homeowner's Association (HOA). The HOA will also be responsible for the maintenance and landscaping of all common areas and open space, trash removal and recycling services, snow removal, and the maintenance of private roads.

[Recycling] Recycling is mandatory in Loudoun County per Chapters 1084 and 1086 of the Loudoun County Codified Ordinance. Building design should include consideration for inside and outside storage of solid waste and recyclable materials to ensure future residents/commercial tenants are able to comply with the County recycling requirements. For non-residential establishments, Chapter 1084.08 (d) sets the minimum required storage capacity for recyclables at 25% of, and in addition to, the total planned solid waste storage capacity.

Additionally, developers and contractors are encouraged to establish a recycling plan for recyclable materials that will be generated during land clearing, construction and demolition.

[Litter Control and Prevention] Construction sites are required to have separate receptacles for construction waste and workers' litter per Chapter 1088.08(b) of the Loudoun County Codified Ordinance.

If you have any questions concerning this correspondence, please call me at (703) 771-5997.

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